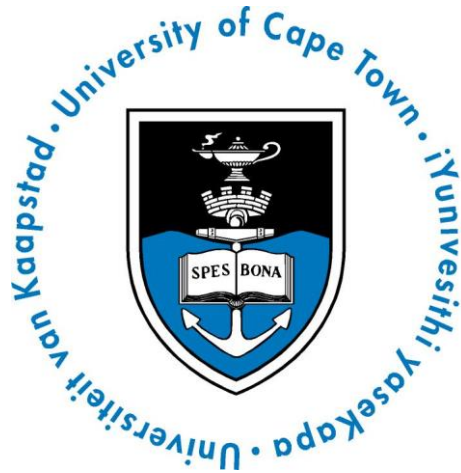


ACTUARIAL RESOURCES IN HIGH DEMAND, WHAT MAKES THEM STAY?

UNIVERSITY OF CAPE TOWN



SCHOOL OF MANAGEMENT STUDIES

INTENTION TO STAY AND RETENTION OF ACTUARIAL RESOURCES

BY:

LYN NYASHA MUZONDO

(MZNLYN001)

A dissertation submitted in partial fulfilment of the requirements for the award of the

Degree of Master of Commerce in Organisational Psychology

Faculty of Commerce

2018

Supervisor: Associate Professor Suki Goodman

#### COMPULSORY DECLARATION

This work has not been previously submitted in whole, or in part, for the award of any degree. It is my own work. Each significant contribution to, and quotation in, this dissertation from the work, or works of other people has been attributed, cited and referenced.

Signature: Signed by candidate

Date: 19 February 2018

The copyright of this thesis vests in the author. No quotation from it or information derived from it is to be published without full acknowledgement of the source. The thesis is to be used for private study or non-commercial research purposes only.

Published by the University of Cape Town (UCT) in terms of the non-exclusive license granted to UCT by the author.

## AKNOWLEDGEMENTS

There are many people who have been an integral part of my journey in different ways since I started my studies at UCT. From the onset, associate professor Suki Goodman my supervisor supported, stretched, challenged and guided me all the way. Thank you Suki. I also want to give credit to Anneli Hardy for sharing her SPSS and statistics knowledge with me. Anneli your teaching skills are exceptional. I have also had the wonderful opportunity to work with Professor Anton Schlechter whose expertise in research I am grateful for. Thank you.

I am also grateful for being a part of MMI Holdings, an organisation in which people development is valued. My former boss and coach Marlene Dipennaar, for always believing that I can do more and be more, thank you. Elmarie Coetzee, a colleague and friend, your focused persistence despite any setbacks encouraged me when I wanted to give up, thank you. I've also led a team with colleagues who have supported me through this journey and "caught all the balls" which I could have dropped. Thank you.

To my beloved Mlu, you are a precious gift and I cannot thank you enough for the prayers, love and patience which I receive each moment from you. To my siblings Idah, Lovely and Praise, you guys keep me going, I hope this achievement will inspire Tanya, Anashe, Seed, Nene my cupcake and Nopa my donut. To my friends, Dr Bvuu, Myste, Bongani, Miry and aunt Hanna, thank you for the wonderful support you always give.

Finally, all glory goes to God my Helper

## TABLE OF CONTENTS

### Contents

LIST OF TABLES .....	4
LIST OF FIGURES .....	5
ABSTRACT.....	6
CHAPTER 1 .....	8
INTRODUCTION .....	8
The Reason for the Study.....	10
Research Questions .....	11
Structure of the Dissertation .....	11
CHAPTER 2 .....	12
LITERATURE REVIEW .....	12
A Theoretical framework.....	12
<i>Retention</i> .....	12
Factors that influence the retention of talent.....	14
Intention to stay.....	15
Total Rewards and Retention.....	17
Non-financial rewards.....	22
Affective commitment .....	28
Job satisfaction.....	30
CHAPTER3 .....	33
METHOD .....	33
Research design .....	33
Participants and Sampling.....	33
Measurement instruments .....	35
Total rewards scale .....	35
Intention to stay.....	36
Affective commitment .....	36
Job satisfaction.....	36
Best-Worst scale .....	37
Qualitative data .....	37
Demographic Characteristics .....	38
Data Collection Procedure .....	38

Statistical Analysis.....	39
CHAPTER 4 .....	40
RESULTS .....	40
Unidimensionality.....	40
Total rewards .....	41
Intention to stay.....	43
Affective commitment .....	43
Job Satisfaction .....	44
Reliability Analysis.....	45
Descriptive Statistics.....	46
Correlation Analysis .....	47
Regression Analysis.....	48
Best-Worst Scale.....	53
Qualitative data .....	55
CHAPTER 5 .....	57
DISCUSSION .....	57
Portability of the measuring scales .....	58
The Best-Worst scale .....	59
Open-ended question .....	59
Predictors of Intention to Stay .....	60
Total Rewards that retain actuarial resources .....	60
Group differences in response patterns.....	62
Study Limitations and Suggestions for Future Research.....	68
Implications of the Present Study .....	70
Conclusion .....	71
REFERENCES .....	73
Appendix A.....	83
Appendix B .....	84

## LIST OF TABLES

Table 1 Participant demographic details .....	34
Table 2 Factor Analysis for Total Rewards Scale.....	42
Table 3 Factor analysis for intention to Stay Scale.....	43
Table 4 Factor analysis for Affective Commitment Scale.....	44
Table 5 Factor Analysis for Job Satisfaction Scale.....	45
Table 6 Cronbach's alpha score for measurement scales.....	45
Table 7 Descriptive Statistics for all Sub-Scales (n=135).....	46
Table 8 Correlation Matrix .....	48
Table 9 Variance Inflation Factor Scores and Tolerance Scores for Predictor Variables.....	50
Table 10 Best-worst total rewards preference results (ranked from best to worse.....	55
Table 11 Open ended reward dimensions results .....	56

## **LIST OF FIGURES**

Figure 1 WorldatWork Total Rewards Model .....	17
Figure 2 Conceptual framework for research.....	31

## **ABSTRACT**

The shortage of qualified actuaries and actuarial science resources in general, remains a challenge for organisations operating in the South African financial and insurance sectors. Access to such resources are a business imperative for these organisations and, therefore, there is a compelling business case to better understand which total rewards elements contribute most to the retention of individuals that possess these critical and also scarce skills. Furthermore, it would seem that traditional strategies that are meant to retain actuaries and/or actuarial science resources are no longer effective and new and innovative approaches in terms of their design and implementation need to be found.

The aim of the present study was, therefore, to investigate the retention of actuarial resources and identify the total rewards elements that will be most useful in creating the conditions that are conducive for them to stay within their respective organisations. Limited research in which the total rewards elements that may contribute most to the retention of actuarial resources, could be found. Greater insight in this area will hopefully enable organisations to develop reward policies and practices that are able to more effectively attract and retain actuarial resources.

A descriptive research design and quantitative approach was employed to estimate the total rewards preferences of actuaries, in other words which reward elements they would prefer and that may be related to their intention to stay. Using a non-probability convenience sampling approach, primary data was collected by means of an online field survey (n = 135). The questionnaire that was used to collect data, included a total rewards sub-scale (21 items), a reward preferences sub-scale based on best-worst scaling (10 items), a job satisfaction sub-scale (6 items), an intention to stay sub-scale (4 items), an affective commitment sub-scale (6 items) and a single open-ended question, which was optional. Data was analysed using descriptive statistics, factor analysis, assessing reliability using Cronbach's alpha and conducting inferential statistics.



The results of the factor analysis indicated that the total rewards dimensions do not influence intention to stay of the participants. Although job satisfaction and affective commitment were found to be significantly positively related to intention to stay, these variables were not found to mediate the relationship between total reward elements and intention to stay. The best-worst scaling results revealed that all participants considered remuneration and career advancement to be the most important total reward element for their intention to stay. For all generational groups, the bottom three reward elements (i.e. ranked) were learning opportunities, performance recognition and employee benefits, respectively.

Traditional reward elements are important to employees with scarce skills. However, customizing reward preferences according to the generational preferences would enable an innovative approach to talent retention of actuarial resources.

## CHAPTER 1

### INTRODUCTION

Organisations depend largely on their human resources for the attainment of strategic objectives, favourable business results and sustained success (Bhati & Manimala, 2011; Robyn, 2012). Engaged and highly skilled employees, the latter colloquially referred to as talent, are therefore perceived to be fundamental to the advancement and sustained growth of an organisation, as well as the realisation of its potential to generate organisational profits and so satisfy the needs of shareholders (Korsakienei, Stankeviciene, Šimelyte & Talackiene, 2015). Being able to attract, engage and retain talent within highly competitive and volatile markets, is considered critical in achieving sustainable organisational success and maintain a competitive advantage (Jensen, McMullen & Stark, 2007). Talent shortages are increasing rapidly, so limiting the ability of organisations to expand and further threaten their continued success with competitive global markets (Gordon, 2009). The need to develop and maintain a sustained competitive advantage necessitates organisations to understand, design and implement effective retention strategies that are able to retain the scarce skills they require.

Faced with labour market shortages and a global economic recession, the retention of skilled employees is an ever-increasing challenge for organisations waging the so-called war for talent (Beechler & Woodward 2009; Singh & Sharma, 2015). Given the importance of human capital for sustainable success, talented individuals will always be in high demand, even more so given a global under supply of critical skills. Critical skills are defined as specific skills required to perform within a specific occupation or profession (Daniels, 2007; Ingham, 2006). Within a developing economy such as South Africa, the urgency of retaining employees that possess unique or critical skills will only intensify as local organisations are being forced to more and more compete globally (Aguinis, 2013; Bussin & Smit, 2013; Bussin & Toerien, 2015; Cascio, 2010; O'Connell & Kung, 2007).

In the present study, the focus was actuaries or actuarial science resources employed within the South African context given that actuarial science resources are considered scarce skills that are in high demand (ASSA, 2016). Scarce skills are defined as occupations and/or professions in which there are fewer qualified individuals, both currently or anticipated to qualify in the future that is required to satisfy the need for such skills (Department of Labour

of South Africa, 2014). A study conducted by the Department of Labour (DoL) into scarce and critical skills in South Africa reported that the highest level of skills shortage was found for actuaries and actuarial support staff (Survey of employment, scarce and critical skills in the insurance sector, 2006). The Insurance Sector Education and Training Authority (INSETA, 2011) skills forecast also listed actuarial resources as a scarce skill for the period 2011 to 2016, a belief amplified by the Actuarial Society of South Africa (ASSA).

The demographics of the membership of ASSA is 1119 fellows (qualified actuaries), 63 associates, and 2,106 students (as at March 2016). The most updated reference for the demand for actuarial resources in South Africa, projected a demand for actuarial resources in the year 2010 being between 2,005 and 2,332 and 4,000 in 2015 (Terblanche, 2009). These statistics illustrate a significant shortage of actuarial resources in South Africa (only 2,985 actuaries in 2016 given a projected need for 4,000 actuaries in 2015). It is readily apparent that the demand for actuarial science resources far outstrips the possible supply and, therefore, retaining these resources is vital for organisations that rely on them.

Actuaries are business professionals who specialize in risk management and understanding the financial impact of uncertainty on individuals and companies. Their expertise lies in risk mitigation; minimization of the negative impacts of specific risks on an institutions; and understanding the impact of different investments on pension funds risk and returns (ASSA, 2016; Chu, Evans & Morgan, 2011; Wilmot 2011). Actuarial scientists have ability to quantify and analyse abstract data and assess risk, enable organisations to safeguard the financial future of their clients (ASSA, 2016). To develop the high level of mathematical and statistical competencies requires that the actuarial qualification be rigorous and not only completed within the university curriculum. In order to attain the designation of Fellow of the Actuarial Society of South Africa, in other words to register as a qualified actuary, individuals need to obtain a university degree in actuarial science and also successfully complete 15 national board examinations (ASSA; Ramjee, Mokonyane & Bagraim, 2014).

Despite the critical nature of actuarial resources and severe shortage of such skills in South Africa, studies could not be found that have investigated the retention of such individuals. The only study that was found related to this topic, was conducted by Terblanche (2009) who reported that the demand for actuaries had grown significantly. Terblanche (2009) found that poor socio-economic conditions in South Africa and global developments created an

international demand for South African actuaries and actuarial students, which resulted in shortages and a highly competitive actuarial resource market. Ramjee et al., (2014) similarly found that globalisation increased the demand for highly skilled workers and increased the mobility of actuaries. Terblanche (2009) found that emigration to developed countries and more favourable remuneration, were the main drivers for actuarial resources leaving South Africa. This is not uncommon though. According to the DoL (2008), the demand for key professionals, not only with this specific profession, has placed pressure on South African employers who have to compete locally and abroad for skilled labour.

There is a general shortage of talent in South Africa, primarily driven by the high rate of emigration of individuals that possess scarce skills (Schlechter, Hung & Bussin, 2014). Talented individuals or human capital are increasingly migrating to developed countries, citing poor remuneration, uncompetitive work environments and high levels of crime as the most common reasons for leaving (African Association for Public Administration and Management, 2008). Other countries, specifically in developed markets, offer benefits and opportunities for citizenship and these become tools for attracting and retaining global talent (Schlechter, *et al.*, 2014; Elegbe, 2010). The actuarial science profession is no exception.

Terblanche (2009) reported that a recruitment agency based in London specialising in placing actuaries, confirmed that there is a high demand for South African actuarial resources abroad. The global experience, remuneration, travel and career opportunities are attractive and are pull factors. To curb the loss of scarce skills, employers need to have an understanding of the rewards that will positively influence their decision to stay (Kootze & Roodt, 2005).

### **The Reason for the Study**

It is hoped that the findings of the current study will enhance the existing knowledge pertaining to the intention of actuaries and actuarial science resources to stay within their current organisations. The present study is particularly relevant given that there is minimal research available on the topic. Furthermore, it is hoped that managers and human resources practitioners will be able to utilise the findings of the present study to design and implement more effective retention strategies focused specifically on the retention of actuarial science resources.

## **Research Questions**

Based on the context and the nature of the research problem as described above, the following research questions were formulated:

1. Is there a relationship between specific total rewards elements and the intention of actuarial resources to stay in their current organisation?
2. Does affective commitment mediate the relationship between financial and non-financial reward elements and the intention of actuarial resources to stay?
3. Does job satisfaction mediate the relationship between financial and non-financial reward elements and the intention of actuarial resources to stay?

## **Structure of the Dissertation**

This chapter provides the introduction, motivation for the research, the aims and research questions under study. Chapter two presents the literature review providing an analysis of the literature that will lead to the proposed hypotheses for the study. This is followed by chapter three which gives a description of the methods used for data collection to investigate the hypotheses. This will cover the research design used in the study, the chosen sampling method, measuring scales, the research procedure followed and statistical analyses for the data collected. Chapter four will present the results obtained from the statistical analyses to test and confirm the proposed research hypotheses, results of the psychometric properties of the measuring scales, descriptive analysis, correlation analysis, regression analysis and mediation analysis. The final chapter five is the interpretation and discussion of the main findings from chapter four, aligned with the literature review and conceptual framework. The same chapter ends off with the limitations of the study, implications and recommendations for future research.

## **CHAPTER 2**

### **LITERATURE REVIEW**

In the literature review, a theoretical framework is presented which was used to explain scarce skills retention as it relates to intention to stay. Factors relating to intention to stay are presented with a specific focus on the various elements of total rewards. Furthermore, a review of selected mediators of intention to stay, namely affective commitment and job satisfaction are discussed. The relationships between the selected constructs are reviewed, with a specific focus on retaining actuarial science resources. The chapter concludes with a presentation of a theoretical or conceptual framework that was further investigated empirically.

#### **A Theoretical framework**

##### ***Retention***

A literature search that included peer-reviewed journals and professional papers published by the Actuarial Society of South Africa (ASSA) did not yield any results. Few, if any, studies could be found that had investigated factors resulting in the retention of actuarial resources. Therefore, in the absence of a published theoretical or conceptual framework relevant to the aim of the present study, employee retention as it relates more generally to knowledge workers (employees with scarce and critical skills) was reviewed and adapted.

Managing retention includes any effort to retain talented, engaged and/or high-performing employees, specifically those that are paramount to an organisation in achieving its strategic objectives (Fatima, 2011; Strydom, Schultz & Bezuidenhout, 2014). Successful retention allows organisations to maintain the required number of competent and engaged employees it needs to deliver on its mandate. Talent retention is critical to organisations given the high levels of competition for talent that has resulted from an under-supply of highly talented and skilled employees (Fegley, 2006).

Failure to retain talented employees may result in temporary and long-standing costs for the organisation (Fatima, 2011, McConnell, 2011; Ghosh, Satyawadi, Joshi, & Shadman, 2013; Kerr-Phillips & Thomas, 2009; Kodwani & Kumar, 2004; Strydom et al., 2014). There are significant direct and indirect costs related to separation and finding replacements for vacant positions, including the inefficiency of new employees, a negative impact on co-workers (low morale, low productivity), loss of productivity while a vacancy is not yet filled, lower service levels, the cost of training and developing new staff, and also costs related to recruitment and selection (McConnell, 2011). Indirect costs to the organisation also include the loss of tacit knowledge, institutional memory, and reduced productivity (George, 2014; Kodwani & Kumar, 2004). It is therefore important to retain talented employees and so curb the escalating costs of hiring and integrating new employees (Ghosh et al., 2013).

Human capital is a valuable asset to any organisations and the longer key staff stay, the more productive and valuable they become (Bersin, 2013; Strydom et al. 2014). It is important that organisations ensure that employees, specifically those with crucial skills stay (Hendricks, 2006). The retention of knowledge workers that possess expert skills is important for the advancement of an organisation's intellectual base (Kerr-Phillips & Thomas, 2009). In a study on knowledge workers in the information technology sector, it was found that there are significant costs associated with the loss of critical skills, including the costs of recruitment and training of new employees, a negative impact on productivity, loss of intellectual capital, and disruptions caused by employee turnover in organisational processes (Bussin & Toerien, 2015).

The retention of knowledge workers that possess critical skills may only be realised if there are specific strategies in place that address this. Masters (2009), in an address to actuaries in Britain, suggested that corporate competition should bring focus to the recruitment and retention of talented individuals with diverse actuarial skills. Similarly, issues of retention in the actuarial profession are of concern in South Africa if demands of the economy are to be met (Ramjee et al., 2014). Successful retention strategies will most likely be realised by organisations that understand the factors which influence employees' intention to stay.

The discussion above expanded on retention of human capital, the costs associated with their turnover and the importance of influencing them to stay. There is an imperative for

organisations to understand factors that influence retention of skilled workers and scarce skills. This will be covered in the section below.

### **Factors that influence the retention of talent**

Organisations undertake different activities within retention strategies and these activities are typically both tangible and intangible (Hatum, 2010). The practical actions include exit interviews, job satisfaction surveys, retention benchmarks, job previews and training (Hatum, 2010). The more intangible actions include various interventions meant to increase employee engagement and the reward and recognition of exceptional performance. Such efforts to retain talent are meant to ensure that business objectives are met through the productivity of engaged talented employees. Effective retention strategies have been shown to include reward systems that are holistic, provide flexible employee benefits, establish a learning culture, and the presence of outstanding leadership (Bussin & Smit, 2013).

What specifically drives retention varies across organisations and industries, requiring substantial effort to design retention strategies that are effective for specific cohorts and contexts. It is recommended that each organisation has its own unique retention model, which takes into account various factors like age, demographics and the role of employee (Bersin, 2013). An approach that is tailored to fit all employers is not effective. Unfortunately, most managers in South Africa find retaining key talented employees to be one of the most challenging aspects of their jobs (Litheko, 2008). Important factors to consider that play a role in retention include remuneration/compensation, job fit, career opportunities and the work environment (Bussin, 2002; Bussin & Smit, 2013; Hatum, 2010; Pregnolato, 2010; Schlechter, *et al.*, 2014; Smit, Stanz & Bussin, 2015). Other factors that contribute to retention include job satisfaction, perception of organisational justice or fairness, employee engagement, specific job characteristics, and organisational culture (Neininger, Lehmann-Willenbrock, Kauffeld & Henschel, 2010). These factors are relevant to cohorts that possess scarce skills and should be considered when determining a framework for the retention of actuarial resources.

The factors mentioned above are known to be relevant to the retention of employees with scarce skills and was used as basis for the development of a framework that explains the retention of actuarial resources. Both Bersin (2013) and Bussin and van Rooy (2014)



recommend that it is crucial that organisations adopt unique retention strategies and apply unique purposeful strategies to retain actuarial resources. In a survey conducted amongst actuarial science graduates in Australia to determine the best methods for retaining them, the following factors were reported to be most important: increasing the remuneration base; providing opportunities for career progression; mobility and exposure in actuarial and other non-actuarial positions (Chu *et al.*, 2011). The professional body for actuaries in South Africa, ASSA, is making an effort to increase its membership to enable them to meet the demands of a growing economy and population, by sponsoring students at university and supporting them after university with finding work placement, and supporting them to successfully pass the actuarial board exams (ASSA, 2016; Ramjee et al., 2014).

To explore the retention of actuarial resources further, the emphasis will be on the intention to stay with their employer, rather than the intention to quit.

### **Intention to stay**

Literature on employee turnover most often focuses on why people leave or quit their position within an organisation. Less is however known about why employees choose to stay in an organisation (Griffeth, Hom, & Gaetner, 2000; Hausknecht, Rodda & Howard, 2009). Instead of only exploring the reasons that drive employees out of organisations, it is essential to also establish why employees choose to stay within an organisation (George, 2015). Understanding the antecedents of intention to stay will hopefully enable human resource practitioners to eliminate ineffective and even obsolete retention policies and practices (Chew & Chan, 2008). Moreover, attention as to why people stay is a more positive and proactive approach to the issue (Cardy & Lengnick-Hall, 2011).

Intention to stay is defined as an employee's conscious and deliberate willingness to stay with an organisation (Tett & Meyer cited in Cho, Johanson, & Guchait, 2009). Organisations benefit from knowing which employees might leave and likely to stay (Ghosh et al., 2013). Such insight may enable organisations to better understand the distinct turnover processes and decisions of individual employees. Understanding the antecedents of intention to stay for actuarial resources may enable organisations that employ them to be proactive in designing interventions aligned with their intention to stay. Despite an exhaustive literature review, no

documented research into the intention to stay construct amongst actuarial resources in South Africa could be found.

Several factors have been proposed and studied that are believed to explain or influence an employee's intention to stay within an organisation, including attractive salaries for actuaries (Terblanche, 2009); perceived promotability and organisational career opportunities in Management Information Systems professionals (Igarria & Greehaus, 1992); affective and continuance commitment amongst actuaries (Bagraim, 2003); skills training in Information and Communication Technology (ICT) knowledge workers (Lotriet, Mathee & Alexander, 2010); job characteristics; opportunities for training and development; perceived supervisor support and career opportunities in medical and information technology (IT) skills (Van Dyk & Coetzee, 2012); early retirement; opportunities for international work experiences; improved lifestyle (Rasool, Botha & Bisschoff, 2012); challenging work; learning and development and flexible work practices for knowledge workers in the banking sector (Reddy & Govender, 2014); rewards and job satisfaction in professional rural nurses in the medical sector (Terera & Ngirande, 2014); affective commitment to the actuarial profession (Ramjee et al., 2014); work-family balance (Bussin & Smit, 2014); financial rewards, recognition, developmental opportunities in skilled workers in science, technology, financial services and information technology (Bussin & Torien, 2015).

The factors mentioned above were drawn from various employee cohorts in South Africa and serve as a point of departure to explore whether these factors are applicable to the retention of actuarial resources. In the studies mentioned above, there seems to be a trend in terms of salary, remuneration, opportunities for development, job characteristics, work life balance, commitment and job satisfaction being the most influential in retention. However, it is not enough to identify the specific facts that are related to retention, but also to identify the ideal mix of these factors that would be most appealing to an actuarial resources cohort.

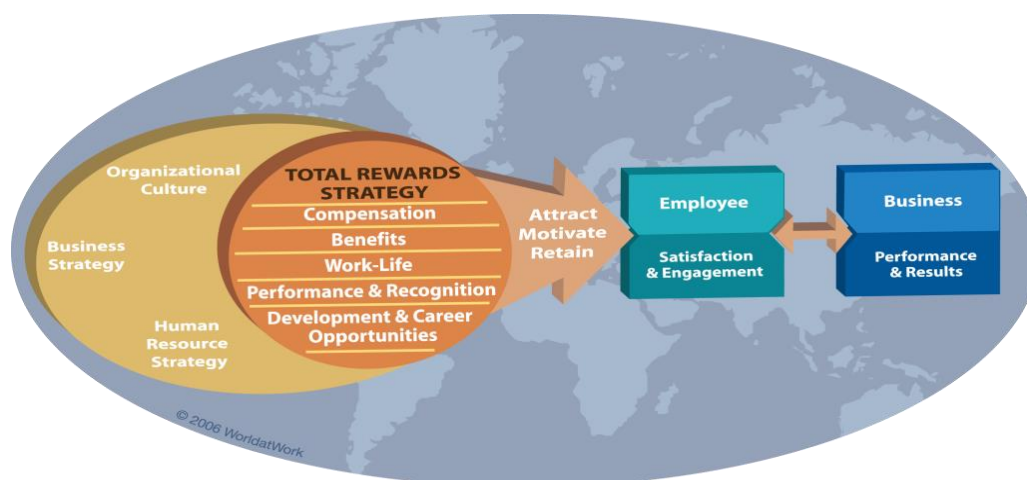
The factors that are believed to influence the intention to stay are integrated within total rewards models. WorldatWork (2008) proposed one such total rewards model, which involves the integration of key reward elements that are believed to attract, motivate and retain talent in such a manner as to assist organisations in achieving desired business results and also lead to

employee job satisfaction. No studies were found to be available that outline an ideal combination of reward elements that may serve to retain actuarial resources in South Africa. This model, which is widely accepted and used by both academics and practitioners alike, was adopted as a basis from which to develop a model for the retention of actuarial resources. The next section will discuss the variables of this total rewards model.

## Total Rewards and Retention

Total rewards models are conceptual tools used by organisations to attract, retain, motivate and satisfy employees, whilst facilitating the achievement of organisational goals. Total reward models typically include two categories of reward elements, namely financial and non-financial reward elements (Armstrong & Brown, 2006; Bussin, 2012; Cable & Judge, 2002; Costello, 2010; Hiles, 2009; Dulebohn & Werling, 2007; WorldatWork, 2008). The reward elements typically found in total rewards models include compensation, benefits, work-life balance, development and career opportunities (WorldatWork, 2010). The financial and non-financial rewards are used in developing attraction, engagement and retention strategies.

WorldatWork is a global association for human resources practitioners and business leaders providing knowledge in compensation, benefits and total rewards. WorldatWork total rewards model emphasises the idea of considering all aspects of reward, with a holistic way of taking into account how employees can be rewarded. The WorldatWork model is graphically depicted in Figure 1 (below).



Adopted from WorldatWork, 2007, p. 1

### Figure 1. The WorldatWork Total Rewards Model

In the past, reward strategies that were meant to attract and retain talent typically focused on monetary reward (Boyd & Salamin, 2001; Bussin & van Rooy, 2014). However, reward and recognition strategies have become multifaceted, increasingly encompassing both financial and non-financial aspects (Bussin & van Rooy, 2014; Irvine, 2010). Monetary rewards typically comprise of basic pay, variable pay, shares and share options, and employee benefits, while non-monetary rewards, include recognition, developmental opportunities, challenging work, career development and promotion opportunities (Bussin & van Rooy, 2014; Bussin & Torien, 2015; Gaylard, Sutherland & Viedge, 2005; Kinnear & Sutherland, 2000; Pregnolato, Bussin & Schletcher 2017; Sutherland, 2004; Van Dyk & Coetzee, 2012; WorldatWork, 2008). Although employees often focus on financial rewards, ironically it has been found that their conduct, motivation and job experience is often largely determined by non-monetary reward elements (Shaul, 2007).

Total reward strategies are mainly utilised in grade and pay structures, pay adjustments, contingent and variable pay, employee benefits and recognition schemes (Armstrong & Murlis, 2007). The results of various research studies demonstrate how reward elements have different influences on the retention of knowledge workers within science, nursing, engineering and information technology. Effectively managed reward systems have shown to ease critical attraction, retention and motivation challenges that many high technology firms face (Rumpel & Medcof, 2006).

The WorldatWork (2008) total rewards model classifies rewards as follows:

- **Compensation:** This is pay given by an employer to employees for services rendered inclusive of time, skills and effort. Compensation includes fixed income and variable pay tied to performance.
- **Benefits:** Programs used to supplement the cash reward given to employees. These include health insurance, income protection, savings and retirement schemes which provide security for employees and their families.

- **Work-Life Effectiveness:** Organisational practices, policies and programs, underpinned by values that recognise the importance of family life, which actively supports employees in their care-giving and family responsibilities.
- **Recognition.** Formal or informal programs that acknowledge employee actions, efforts, behaviour and/or performance in line with the goals of the business strategy i.e. to reinforce desirable behaviours which add to a company's success.
- **Performance Management.** The alignment of organisational, team and individual efforts toward the achievement of business goals and organisational success. Performance management includes establishing expectations, skill demonstration, assessment, feedback and continuous improvement.
- **Career Development.** Provides opportunities for employees to advance their skills and competencies in both their short- and long-term careers as to assist career advancement.

The WorldatWork total rewards model is used in the present study as a framework that integrates key reward elements, both financial and non-financial, in such a manner as to attract, motivate and retain key talent (WorldatWork, 2008). This model enables organisations to classify different rewards that may impact on retention. No study was found in which the WorldatWork total reward model was used to assess the rewards preferences of actuarial resources in South Africa. However, several studies have successfully utilised this model within different employee cohorts working in South Africa, including knowledge workers, engineers, IT professionals, and artisans (Bussin & van Rooy, 2014; Pregnolato, Bussin & Schlechter, 2017; Pregnolato, 2010; Schlechter, Faught & Bussin, 2014a; Schlechter, Hung & Bussin, 2014b; Smit, Stanz & Bussin, 2015). The WorldatWork total rewards model was used in the present study as it covers a combination of financial and non-financial rewards and is considered a valid model for the attraction, motivation and retention of talent in general.

Based on the arguments presented above, the following hypothesis was formulated.

*Hypothesis 1: Both financial and non-financial total rewards elements, as depicted in the total rewards model, are positively related to actuarial resources' intention to stay*

## **Financial reward elements**

It is important for employers to understand how knowledge workers are attracted to different types and levels of financial rewards and how they relate to effective talent attraction and retention (Schlechter et al., 2014). Individuals seek and remain in employment for various reasons, compensation arguably being the central factor (Dulebohn & Werling, 2007). Traditionally, financial reward has been a defining feature central to any employment relationship (Schlechter et al., 2014; Tornikoski, 2011).

Financial rewards include remuneration, variable pay, share ownership, monetary employee benefits and recognition schemes (Bussin & Van Rooy, 2014). The next section will explore the different sub-components of financial rewards, including monetary benefits, monetary recognition and remuneration.

## **Compensation**

Remuneration or compensation (the terms are used interchangeably) are cash payments provided by an employer to an employee in exchange for their discretionary effort (WorldatWork, 2008; 2016). The typical form compensation takes is a salary or fixed basic pay and the amount of money paid is determined by the pay structure within an organisation (WorldatWork, 2008). Compensation addresses the financial needs for an income and is instrumental to people as it allows them to satisfy a number of their pressing needs (Armstrong & Murlis, 2007). Money is further associated with the achievement of recognition, status and power and therefore individuals are more attracted to companies that offer higher levels of pay (Schlechter et al., 2014a).

In a study conducted amongst artisans, it was found that competitive salaries would ensure they stay with their organisation (Bussin, 2011). Another study conducted amongst hospital managers in South Africa, remuneration or salary, benefits, pension, insurance and bonus reflected the advancement of current and future needs of employees and was also found to influence their intention to stay (Malambe & Bussin, 2013). Knowledge workers in the IT sector indicated that basic or fixed pay and the opportunity to earn financial bonuses were important to them (Bussin & Toerien, 2015). Respondents to a survey on actuarial graduates

in Australia reported that their employer could best retain them by increasing the base remuneration or offer opportunities for career progression, so allowing them to earn more money (Chu et al., 2013). In other studies on expatriate scarce skills, it was also found that remuneration was an important attribute for job applicants when considering job offers (Tornikoski, 2011).

Although pay is important for all employees, different age groups seem to value different remuneration structures (Schlechter et al., 2014b). There also seems to be evidence that for some individuals the level of remuneration is not deemed important in employee retention, but rather the perception of being paid fairly which was strongly correlated to employee commitment (Higginbotham, 1997). Kochanski and Ledford (2001) proposed that employees would be retained when remuneration was perceived to be competitive, employees comprehended their pay system and performance goals were clear that need to be met to be eligible for a salary increase and/or bonuses.

Other monetary rewards, such as bonuses or incentives are also used to retain key talent. In a survey by WorldatWork (2002) 84% of respondents reported that incentive bonuses were an effective retention tool that positively influenced their intention to stay.

## **Employee Benefits**

Employee benefits are an essential part of a total reward strategy and are used by an employer to complement the cash compensation that employees receive (Pregiolato, 2010; WorldatWork, 2012). Benefits are typically in the form of a pension, perks (e.g. company cars, paid holidays), health and welfare plans (including death and disability benefits), retirement plans (both defined benefit and defined contribution plans) and sick leave (Armstrong & Murlis, 2007; WorldatWork, 2008). Provisions for retirement indicate an appreciation of an employee's value to the company and contribution to an employees' future financial security (Du Preez, 2009). Other benefits include study leave, maternity and paternity leave, flexible working hours and working from home. Such benefits serve as an attraction tool and provide for the needs of employees and are not usually performance based (Armstrong & Murlis, 2007; Schlechter et al., 2014b).

The WorldatWork Attraction and Retention survey (2007) reported that 90% of participants ranked paid vacation as having the highest impact on attraction and retention. A further 95% of the participants ranked medical plans as either having a moderate or high impact on attraction and retention. It is therefore evident that considerable value is placed on employee benefits. Given increasing medical and insurance costs, the provision of such employee benefits may potentially influence actuarial resources to stay in their current organisation or leave for a better provision of benefits elsewhere.

The total reward management model enables employers to recognise importance of providing suitable monetary rewards, but also stresses the necessity to complement them with other (non-financial) reward elements (Armstrong, 2010; Chiang & Birtch, 2011). In sum, regarding effective job rewards as pay alone may be limiting as different types of job rewards should be considered to influence employees' retention.

Given the arguments presented above, the following hypothesis was formulated:

*Hypothesis 2a: Financial rewards are significantly positively related to actuarial resources' intention to stay*

### **Non-financial rewards**

Non-financial rewards may be derived from the work itself, for example having autonomy and/or recognition, or in the form of skills development and training opportunities, career development opportunities, work-life balance support, performance management and recognition, various goods or services, a positive work experience and having high quality leaders (Armstrong & Murlis, 2007; Armstrong & Brown, 2006; Aguinis, Joo & Gottfredson 2013; WorldatWork, 2016).

Non-monetary reward and recognition has been shown to be important in influencing employees' intention to leave or stay in an organisation and also that pay alone is not a sufficient factor to assure the intention to stay (Chew & Chan, 2007). Chew and Chan further proposed that low remuneration may drive employees out of the organisation, but high remuneration will not translate to keeping them either. Relational rewards are a form of non-



financial rewards that complement the monetary rewards that are offered to employees (Brown, 2001; Chew & Chan, 2007).

Non-monetary incentives are becoming more popular in organisations because of the economic decline and lack of monetary resources necessary to support exorbitant financial incentive programs (Morrell, 2011). Such incentives are beneficial in two ways; employers are able to lower costs whilst increasing employees' motivation to stay. An argument for the importance of non-monetary incentives is that they have been shown to improve intrinsic motivation, even more so than monetary incentives (Aguinis et al., 2013; Cameron & Pierce, 2002; Dewhurst, Guthridge & Mohr, 2009; Harunavamwe & Kanengoni, 2013; Morrell, 2011). Employees perform tasks based on the enjoyment they derive from doing it, which is a focal advantage of non-monetary rewards (Morrell, 2011).

Most sustainable and effective retention programs do not include monetary incentives, but rather focus on intangible rewards (Bussin & Smit, 2013; Chew & Chan, 2007; Harunavamwe & Kanengoni, 2013; Jensen, McMullen & Stark, 2007). Although it is undeniable that employees want competitive compensation, pay can be an external, controlling variable that may not be sustainable in the long run. Skills development and opportunities for growth, for example, are important factors for staying in an organisation and remaining motivated (Harunavamwe & Kanengoni, 2013; Islam & Alam, 2014).

In the literature reviewed on the relationship between non-financial rewards and relationship the intention to stay, no studies were found to investigate this relationship within an actuarial resources cohort. The review below will, therefore, consider non-financial rewards in knowledge workers and employees with scarce and critical skills and the arguments are adapted to the focus of the present study.

## **Work-life Balance**

Work-life balance is defined as "...a specific set of organizational practices, policies and programs, plus a philosophy that actively supports efforts to help employees achieve success at both work and home" (WorldatWork, 2016, p. 4). Benefits associated with work-life emphasis include initiatives that assist employees realise enhanced equilibrium between work and personal activities (Aguinis, 2013). Aside from monetary rewards, employees offer

childcare, eldercare, subsidised fitness club memberships, time off work and other professional services (Bussin & Smit, 2013; Vermuelen & Sonubi, 2015). Flexible work options, such as flex time, reduced work week and telecommuting also enable work-life balance (WorldatWork, 2016).

Idris (2014) in a study of work-life balance for professionals working in Malaysian banks, argued that increasing financial benefits was not a sustainable retention strategy and organisations were relying on flexible work as an alternative. Idris (2014) proposed five types of flexible working practices, including "...flex time, job sharing, flex leave, flex career and flex place" (p. 1). The rise of so-called flex work has been driven by factors such as more women pursuing careers in South Africa, single parent families, longer hours spent at work and the advancement of technology (Idris, 2014; Vermuelen & Sonubi, 2015). Being able to offer such arrangements enables organisations to effectively compete for scarce talent. To retain skilled talent, other work-life programmes currently on offer in some organisations include, on-site child care, sabbaticals, work from home, psychological services, financial, legal and family counselling (Pregolato, 2010; Vermuelen & Sonubi, 2015).

## **Performance management**

The total reward model suggests that performance management aligns employees' efforts towards attaining business goals through establishing clear expectations, ongoing assessment and feedback that enables performance and development (WorldatWork, 2016).

In a study on what influences employees to stay, an effective performance management system focused on job performance was found to encourage high performers to stay (Hausknecht et al., 2009). It is believed that talent will stay if their work is challenging, meaningful, interesting with clear growth direction as determined through performance management processes (Aguinis *et al.*, 2012). This offers advancement opportunities for high performers, whilst enabling them to grow within an organisation. Performance management is also critical to influencing employee engagement which is a key factor to employee retention (Hausknecht et al., 2009; Aguinis, 2013). As part of performance management systems, employers assist employees to set career and life goals and to assist them to match these goals with organisational goals (Bussin & Smit, 2013). When employees are able to see

how they can achieve their own career and life goals simultaneously with organisational goals, this increases their likelihood of staying with the organisation (Bussin & Smit, 2013).

Effective performance management approaches align pay or bonuses to employees who perform in line with identified organisational goals (Armstrong & Murlis, 2002; Pregnolato, 2010). When rewards are linked to performance management, this becomes an example of pay for performance that has been shown to retain talented individuals.

### **Recognition**

Recognition includes formal and informal programs that recognise employee positive actions, efforts, behaviour and/or performance directed at supporting the attainment of the business strategy, in other words are meant to reinforce extraordinary accomplishments that contribute to organizational success (WorldatWork, 2012; 2016). Non-monetary recognition will never replace adequate pay, but compliments financial rewards (Ghosh et al., 2012).

### **Career development**

Career development consists of learning experiences designed to increase an employees applied skills and competencies (Aguinis & Kraiger, 2009; Pregnolato, 2010). Such opportunities are systematic efforts to improve an employee's knowledge, skills and attitudes for personal growth for both their current and potential future roles (Aguinis & Kraiger, 2009). Talented employees need opportunity, guidance and support to equip them for whatever level of responsibility they wish to achieve (Armstrong & Murlis, 2007). Ambitious driven employees will seek these opportunities themselves, if their organisation does not clarify the scope of development it can offer to them (Armstrong & Murlis, 2007).

Employers offer opportunities for learning and development that expose employees to experiences and coaching that prepares them for their particular levels of responsibility (Armstrong & Murlis, 2004). Learning opportunities include the provision of corporate training; technological training; attendance of external conferences; self-development tools; on-the-job training; rotation programs at senior levels, such as project leadership or involvement in an important project; and sabbaticals (WorldatWork, 2008). Career development and assisting employees to clarify their future career path was identified as strong predictors of intention to stay (Sturges & Guest, 2001).

Employees appraised exciting and challenging job activities, as well as career development opportunities amongst the top reward factors that had retained them (Kaye & Jordan-Evans, 2002). Opportunities for learning and career development increase the chances of an employee staying within an organisation (Kyndt, Dochy & Michelson, 2009). If employees have a perception of not learning or growing, they are likely to look for opportunities which they feel will give them learning and growth in their respective industry (Kyndt et al., 2009). A strong predictor of employees' intention to stay is the employee's opinion of the importance of learning within their organisation (Kyndt et al., 2009).

In a study on employee training and job satisfaction, career development was found to improve intention to stay (Chiang, Back & Canter, 2005). In another study on younger graduates, career development with clarity on career paths and progress was found to be the strongest predictor of intention to stay (Arnold & Mackenzie-Davey, 1994).

Learning and career development for actuarial resources is based on the requirements for continuous professional development (Lowther & McMillan, 2014). The main goal is to build the future of an actuarial resource to become an advanced, multidisciplinary actuary, so they can be open to other disciplines (Levay, 2004). Levay proposed looking at actuarial development beyond the pure financial domains. This could be achieved by understanding the development phase the actuary is in i.e. as a student, new professional or experienced professional. These stages would be marked by different development needs, for example students drawing from frameworks of professional frameworks for skills; new graduates learning to blend knowledge into real work situations; and experienced professionals requiring new contexts to seek out new challenges (Lowther & McMillan, 2014).

Following Levay's (2004) proposal for taking cognisance of developmental stages for actuarial resources, Lowther, McMillan and Venter (2009) suggested the following: technical, life skills, interpersonal and communication, business management, ethical and professional skills for retention of actuarial resources. Respondents to a survey on actuarial professional development indicated that most of the post qualification development was acquired through work experience and less from professional conventions (Levay, 2004; Lowther & McMillan, 2014). It therefore suggests that relevant career development is a potential retention strategy.

After a search of literature, no documented evidence of a significant relationship between career development and actuarial resources intention to stay could be found. However, the discussion above indicates a need for the development of actuarial resources to deliver according to their expected professional standards. Understanding the aspects of career development that would be meaningful for actuarial resources, in terms of enhancing their career development strategies will be useful to organisations wanting to retain such individuals.

### **Career Opportunities**

Career opportunities refer to all factors that contribute to a clear career path and career planning being in place for employees to follow their own career goals (Armstrong & Murlis, 2007; Ghosh et al., 2013; Robinson, Murrells & Clinton, 2006; WorlDatWork, 2008). These may include progression into a senior and more complex position in an organisation, exposure outside one's department; publishing articles; assignments with professionals; global exposure; internal work changes; job rotation, talent and succession planning processes (WorlDatWork, 2008; Pregnolato, 2010; )

Individuals that possess critical skills need to be in jobs that are complex enough to provide meaningful work assignments which make optimal use of their skills (Armstrong & Murlis, 2004). When employers provide internal career opportunities, ensuring that their talented employees are assigned into positions that facilitate the delivery of greatest value to the organisation, it positively influences their retention (WorlDatWork, 2012).

Amongst other factors, students chose careers in the insurance sector based on opportunities for leadership and proprietorship (Acharyya & Secchi, 2015). Local and international insurance firms need to create opportunities to ensure that employees find meaningful work. As mentioned above, most actuarial resources in South Africa are employed in the insurance and financial services sector. It is therefore important to create ideal career opportunities for this profession, as well to encourage them to stay within their organisations. This might be one of the solutions to address the challenge of actuarial resources emigrating overseas in pursuit for better career opportunities (Terblanche, 2009).

The reward elements listed above, including work-life, performance management, recognition, career opportunities and career development are clustered into a single variable, namely non-financial rewards.

The arguments presented above led to the formulation of the hypothesis below:

*Hypothesis 2b: Non-financial rewards are significantly positively related to actuarial resources' intention to stay*

### **Affective commitment**

Job satisfaction and affective commitment are important attitudes towards work. Affective commitment has been found to be positively related to intention to stay in employees (Allen & Meyer, 1996; Ghosh et al., 2013; Beck & Wilson, 2012). It is a point of interest to determine how job satisfaction and affective commitment would be experienced in the actuarial resources cohort in addition to the total rewards. A study that was conducted amongst actuarial resources in South Africa focussed on affective commitment towards the profession, rather than on the intention to stay within an organisation (Ramjee et al., 2014).

Organisational commitment is linked to both work and non-work behaviours and has been defined as a psychological link between the employee and their organisation, which decreases the chances that the employee will willingly leave the organisation (Allen & Meyer, 1996). The psychological link can take three forms, namely affective, continuance and normative commitment. Affective commitment is the identification with, involvement in, and emotional attachment to the organisation (Allen & Meyer, 1996; Allen & Meyer 1991). When employees have continuance commitment, they weigh up the costs associated with leaving the organisation and often stay because they feel they have put so much in (Allen & Meyer, 1996). In normative commitment, a sense of duty to the organisation makes employees stay because they feel they ought to (Allen & Meyer, 1996).

The link between affective commitment and retention relates to supportive people management practices, which indicate an organisation's concern for its valued human capital. These efforts prompt attitudinal and, probably, behavioural responses including increased

commitment, continued service to the organization, and a lower intent to quit that in turn results in a reduction of actual turnover (Meyer et al, 1993). It is, therefore, expected that employees who report greater levels of affective commitment will express lesser intention to leave an organisation. Respondents who scored high on affective commitment reported that remaining in the organisation was important to them and even that they would spend the rest of their careers therein (Meyer & Herscovitch, 2001).

The first documented study in South Africa on actuarial resources focussed on South African actuaries and their professional commitment (Bagraim, 2003). The findings of this study were that actuarial resources were highly committed to their profession. Fellows of the actuarial society of South Africa were surveyed on their commitment to their profession and it was found that most actuaries were committed to their profession (Mokonyane & Ramjee, 2014). No studies were, however, found that focused on the affective commitment of actuarial resources as it relates to staying in their organisations. Understanding whether affective commitment is related to actuarial resources intention to stay with their organisation, was therefore explored in the present study.

### **Affective commitment as a mediator with intention to stay**

The relationship between the total rewards elements and intention to stay as mediated by affective commitment. If affective commitment is strong, an employee is likely to remain in an organisation out of their free choice (Allen & Meyer, 1996; Meyer & Herscovitch, 2001). Affective commitment influences a more diverse range of behaviours such as increasing intention to stay, attendance and employment which influence retention (Meyer & Herscovitch, 2001). An employee is likely to stay in an organisation if affective commitment accompanied with desire and not a sense of duty is present (Meyer & Herscovitch, 2001). Affective commitment accompanied with desire, was found to be a strong predictor of intention to stay. It is the strongest and most consistent predictor of desired outcomes in organisations such as employee retention (Allen, Shore & Griffeth, 2003). Including affective commitment would thus strengthen the proposed relationships in this study. This leads to the formulation of the hypothesis below:

*Hypothesis 3: Affective commitment mediates the relationship between total rewards and intention to stay amongst actuarial resources.*

## **Job satisfaction**

Job satisfaction is the positive emotional state which comes about as an individual's appraisal of their job (McShane & Von Glinow, 2007). Job satisfaction could be defined from various components: as affective orientation towards a job (Adams & Bond, 2000; Mueller & McCloskey, 1990); as an attitude directed to the job, as anticipated from the job, or a belief system comprising of values and norms (Meeusen, Van Dam, Brown-Mahoney, Van Zundert & Knape, 2010). The motivational theory suggests that job satisfaction is realised when individual needs, values and expectations are met in the place of work (Coomber & Barriball, 2007; Mafini & Dlodlo, 2014). Intention to stay or leave an organisation was an outcome of affective variables such as job satisfaction (Coomber & Barriball, 2007). Thus job satisfaction is a multidirectional important psychological component of intention to stay.

Job satisfaction is influenced by factors such as pay, opportunities for career advancement, work itself and supervision (Aydogdu & Askigil, 2011). Meeting employee expectations was critical in ensuring job satisfaction (Lu, While & Barriball, 2005). Then in addition to the characteristics of the job, being satisfied with the quality of relationships at work has also been associated with job satisfaction (Van Dick, Christ, Stellmacher, Wagner, Ahlswede, Gruber, Hauptmeier, Hohfeld, Moltzen & Tissington 2004). Employees with lower job satisfaction were likely to choose to leave the organisation and this would also lead to lower commitment to the organisation (Aydogdu & Askigil, 2011).

A South African study also supported the notion that job satisfaction is linked to intention stay (Radebe & Dhurup, 2014). Therefore the level of employee job satisfaction provides an indication as to whether or not the employee experiences the workplace as positive and with that perception the decision to stay or leave is made. Unfortunately amongst all these cohorts, none has focussed on actuarial resources thus it would be a point of interest to include it in this study as a mediating variable.

## **Job Satisfaction as a mediator with intention to stay**

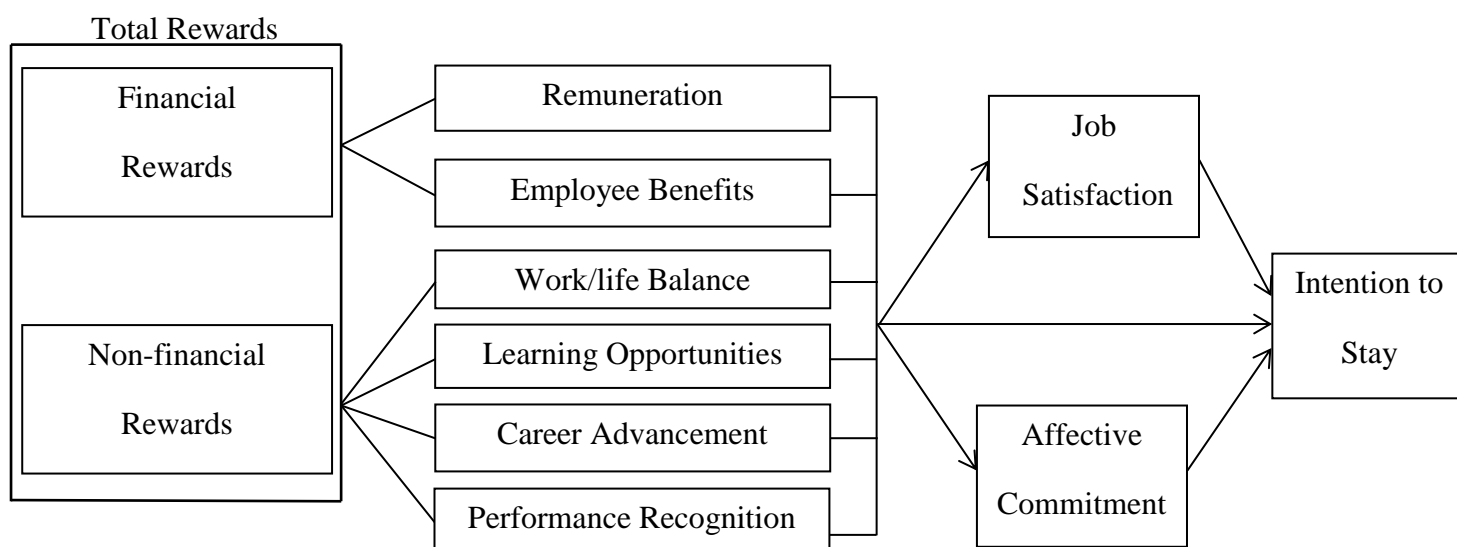
In a review of literature on job satisfaction, Aydogdu and Askigil (2011) found that factors such as pay, opportunities for career advancement, work itself and supervision amongst other



factors were associated with the creation of job satisfaction. Employees with lower job satisfaction were likely to choose to leave the organisation and this would also lead to lower commitment to the organisation (Aydogdu & Askigil, 2011). The level of employee job satisfaction provides an indication as to whether or not the employee experiences the workplace as positive and with that perception the decision to stay or leave is made. This leads to the formulation of the hypothesis below:

*Hypothesis 4: Job satisfaction mediates the relationship between total rewards and intention to stay of actuarial resources.*

These proposed relationships are depicted graphically in the conceptual model in Figure 2 below:



**Figure 2.** *Conceptual framework for research*

The literature review proposes a conceptual framework for total rewards associated with actuarial resources intention to stay (see Figure 2). This is based on factors which relate to some knowledge workers or scarce and critical skills. There has not been much documented on actuarial resources that fall into this category. The assumption made is that if the factors presented are met, it will increase intention to stay for actuarial resources. Given that actuarial resources in South Africa are a scarce skill (ASSA, 2016; Ramjee et al., 2014;

Terblanche, 2009), it is important to ensure that there is an understanding of what will make them stay with their employer. Further, it is essential to establish whether job satisfaction and affective commitment are experienced in the cohort which decides to stay. These factors are important as they are suggested in Figure 2 to impact intention to stay.

## CHAPTER 3

### METHOD

The purpose of this chapter is to describe the methods used in the present study to investigate how selected reward elements are associated with actuarial resources employees' intention to stay. The method chapter is presented in five sections, namely research design, participants, measurement instruments, procedure and statistical analyses.

#### Research design

A descriptive research design was utilised. Quantitative and qualitative data was collected using a field survey and a cross-sectional *ex post facto* approach to collecting the data was further employed. The quantitative method which was utilised allowed for statistical analysis to be conducted to assess the relationships between variables (Salkind, 2012). This is a cost effective approach to collect data and maximise sample size (Mouton & Babbie, 2001).

#### Participants and Sampling

The target population for the present study were actuarial resources employed within South Africa; both fully qualified actuaries as well as actuarial students who were still writing their ASSA examinations. The inclusion requirement was that the actuarial resources needed to be working in a South African organisation.

Non-probability convenience sampling was used due to logistical factors such as accessibility of participants, time and budget constraints. Once data collection was completed, one hundred and sixty (160) responses were received. After the data was cleaned, a realised sample of one hundred and thirty five (135) usable responses was available for further analysis. The twenty five (25) cases were excluded from the analysis. The sample (n=135) represents 4% of the total number of actuarial resources in South Africa (based on March 2016 statistics).

The sample (n=135) consisted of 63.8 % male participants and 34.8% female participants. Participants ranged between 21 to 64 years of age ( $M = 33.15$ ;  $SD = 8.52$ ). The majority of participants were between 24 and 31 years of age (54.6% of the sample). The majority of the sample had completed tenure of up to 5 years with their current employer (60.7%). The demographic characteristics of the sample are summarised in Table 1 (below).

**Table 1: Participant demographic details ( $N = 135$ )**

Biographical variable	Number	Percentage
<b>Gender</b>		
Males	86	63.8
Females	47	34.8
Prefer not to say	2	1.4
<b>Total</b>	<b>135</b>	<b>100</b>
<b>Age</b>		
Millennials (21 – 34)	91	67.4
Generation X (35 – 49)	33	24.4
Baby boomers (50 and above)	10	7.4
Missing	1	0.7
<b>Total</b>	<b>135</b>	<b>100</b>
<b>Tenure with current employer</b>		
Less than 1 year up to 5years	82	60.7
Qualified >5years up to 10years	34	25.2
Qualified >10years up to 15years	5	3.7
Qualified >15years and above	13	9.6
Missing	1	0.7
<b>Total</b>	<b>135</b>	<b>100</b>
<b>Actuarial qualification</b>		
Not qualified	86	63.7
Qualified up to 5years	25	18.5
Qualified >5years up to 10years	5	3.7
Qualified >10years and above	18	13.4
Prefer not to say	1	0.7
<b>Total</b>	<b>135</b>	<b>100</b>

It is noted that two thirds of the sample are men. This correlates to a study on actuarial resources in South Africa which reported that the actuarial profession was dominated by men who made up about 80% of the resources (Ramjee *et al.*, 2013).

Participants' data were also divided into generational groups. Generation refers to a people born in the same time frame marked by significant historical or social experiences. Each generation develops a marked and distinct experience which influences its perceptions about organisations and their expectations of the employer (Gursoy, Maier & Chi, 2007). Generations have been labelled as follows: Baby Boomers (born between 1943 and 1960); Generation X (born between 1961 and 1980); and Millennials (born between 1981 and 2000).

### **Measurement instruments**

The various sub-scales meant to measure the constructs under investigation i.e. job satisfaction, affective commitment, and intention to stay was combined into a composite questionnaire. A best-worst scale was further used to assess the rewards preferences of the participants. An open ended question was offered to afford the participants an opportunity to add any factors that they believe would influence their intention to stay and which had not been covered in the sub-scales. In total, 54 items were included in the questionnaire and it took approximately 10 – 15 minutes to complete. A copy of the full questionnaire can be found in *Appendix B*. The measurement sub-scales are reviewed below.

### **Total rewards scale**

Participants were requested to complete a total rewards scale developed by Pregmolato (2010) and that was based on the WorldatWork total rewards model. The original sub-scale consisted of 20 items that measure the five reward elements of the total rewards model i.e. remuneration and benefits, performance and recognition, work-life balance, learning and career advancement (Pregmolato, 2010). A five-point Likert-type response scale was used with 1 representing “not at all important” and 5 indicating “very important”. Cronbach's alpha values ranged between 0.51 to 0.71 for the sub-scales of the total rewards scale (Pregmolato, 2010).

The total rewards scale was adapted and one item in the original scale was split into two items. The item “Having a manageable workload and reasonable work space” was split into two items i.e. “Having a manageable workload” and “Having a reasonable work space”. All the other items from the original scale were retained.

### **Intention to stay**

Intention to stay was measured using a 4-item scale developed by Ma (2010). A satisfactory Cronbach's alpha ( $\alpha = 0.75$ , i.e.  $>.7$ ) was reported previously when this scale was used (Nasyira *et al.*, 2014). An example of one of the items is "I would turn down a job offer from another company if it came tomorrow". Participants were required to indicate their response to the items on a five-point Likert-type scale that ranged from (1) *strongly disagree* to (5) *strongly agree*. Responses on the higher end of the scale indicate a high intention to stay in the organisation.

### **Affective commitment**

The six item affective commitment scale developed by Meyer, Allen and Smith (1993) was used in the present study to measure the construct. A satisfactory Cronbach's alpha coefficient of 0.82 has been reported previously (Meyer *et al.*, 1993). The six items that are meant to measure affective commitment come from the original 18-item organizational commitment scale that measures all three dimensions of commitment i.e. continuance, normative and affective commitment (Meyer *et al.*, 1993). An example of the six affective commitment items is "I would be very happy to spend the rest of my career with this organization". Participants were asked to respond to the items on a five-point Likert-type response scale ranging from (1) *strongly disagree* to (5) *strongly agree*.

### **Job satisfaction**

Iverson, Olekalns and Erwin's (1998) six item scale was used in the present study to measure job satisfaction. They reported a satisfactory level of internal consistency (Cronbach alpha = 0.85). Participants were requested to rate their level of job satisfaction by responding to scale items on a five-point Likert-type response scale with 1 (*strongly disagree*) to 5 (*strongly agree*). An example of the items in the scale is "I feel well-satisfied with my job".

## Best-Worst scale

A best-worst (BW) scale, adapted from one developed by Louviere, Lings, Islam, Gudergan and Flynn (2013) was utilised in the present study and participants were asked to choose the reward element which “most likely” and the reward element which “least likely” would influence their decision to stay. This was done on 10 comparison sets, each consisting of a different combination of three reward elements.

The analysis is based on assigning the “most likely” reward element a value of +1 and the “least likely” reward element a value of -1. As each reward element appears five times in the 10 sets, preferences are measured on a scale bounded by -5 and +5. The analysis of the data involves summary statistics, such as frequencies, sums and means.

Out of a set of three reward elements, if a participant thought that remuneration was most likely to lead to their retention and work-life balance as the least likely to lead to their retention, they would provide the items with ticks as in example below.

Most likely	Comparison set 1	Least likely
	Performance and recognition	
x	Work life balance	x
	Remuneration	

## Qualitative data

Additional open-ended questions were included to allow participants to add other specific rewards that may be important for them, but that had not been included in the questionnaire. The questions that were included were:

“Are there any additional rewards not included in this survey that could influence your intention to stay in current organisation?”

For the purposes of potentially doing a follow up study around actual intention to stay the following question was added;

“Would you be prepared to be contacted after 6 months to check if you are still in the organization, if yes, please add your email address below?”

### **Demographic Characteristics**

A short section to capture demographic details, including participants’ age, gender, number of dependents, qualification (whether a fellow or still a student), how many years qualified and years in current employment was included.

### **Data Collection Procedure**

The questionnaire was placed on the Qualtrics data-collection software. Before proceeding with survey distribution, ethical clearance was obtained from the Commerce Faculty Ethics in Research Committee of the University of Cape Town (UCT). After approval was received, a pilot study was conducted with five voluntary participants who provided feedback to the researcher after completing the survey.

The ethics approval and a letter of consent were sent to a South African organisation which employs actuarial resources. Upon receiving consent from the organisation to conduct the survey, e-mail addresses for actuarial resources were obtained from the organisation. The database included all actuarial resources of the organisation.

E-mail invitations to complete the survey were distributed either directly to participants from the researcher or through snowball sampling (*see Appendix A*). Participants were e-mailed a brief description of the research study along with an invitation to participate. The e-mail contained information about the purpose of the study, the survey URL and indicated that participation was voluntary and that all responses would be anonymous and confidential.

Participants were offered an incentive for completing the survey, a shopping voucher to the value of R1000, and those who wanted to be considered for a prize in a lucky draw could add their contact details at the end of the survey. The incentive was presented to all participants of the study, but participation was optional. The contact details provided in terms of the lucky



draw was further not part of the raw data file to ensure that no respondent would be identifiable and therefore remain anonymous. A copy of the e-mail can be found in (*see Appendix B*).

Data was gathered over a period of five and a half weeks from August 2016 to September 2016. Weekly reminders were sent to invited participants over a period of five weeks. After the survey closed, a random draw was conducted amongst those participants who indicated that they would like to be eligible for the shopping voucher prize. These participants would have provided their contact details in the survey. The winner was then contacted using the contact details provided and arrangements were made to forward the voucher.

### **Statistical Analysis**

The Software Package for Social Science (SPSS) version 23 was used to perform statistical analysis on the data for the research. Descriptive statistics were used to describe the sample. All sub-scales that were used in the survey were analysed for reliability and validity before the data obtained from them were used in any further analyses. Internal consistency or reliability was assessed by means of calculating Cronbach's alpha coefficient and following the SPSS item-analysis procedure. The validity of the scales was further assessed by means of Exploratory Factor Analysis (EFA). Pearson's product moment correlational analysis was conducted to determine the strength and direction of the relationships between variables (Pallant, 2011). Multiple regression analysis was also conducted to determine the relationship between total rewards, job satisfaction and affective commitment (independent variables) and the intention to stay dependent variable (Field, 2009; Pallant, 2011). The Best Worst Scale (BWS) was used to assess reward preferences.

The raw data file was cleaned and participants' data for a particular sub-scale was deleted if more than 25% of the responses were missing for the sub-scale (incl. total rewards, intention to stay, affective commitment and job satisfaction) as suggested by Burns and Burns (2008). Doing so resulted in the data of 25 participants being deleted due to missing data of more than 25%. The final sample consisted of 135 responses to the questionnaire.

## **CHAPTER 4**

### **RESULTS**

The results of the statistical analyses are presented in this chapter. The psychometric properties of the four scales were determined using Exploratory Factor Analysis (EFA) and internal consistency (reliability) analyses. EFA was used to determine the factor structure of all the items in the total rewards scale, intention to stay scale, affective commitment scale and job satisfaction scale. Internal consistency test for reliability was conducted for all 4 scales using the Cronbach's Alpha coefficients. The best-worst scale was used to determine reward preferences.

#### **Unidimensionality**

The unidimensionality of each sub-scale was assessed by means of Exploratory Factor Analysis (EFA) and calculating Cronbach's alpha.

EFA is an indicator of construct validity (Pallant, 2011). The Principle Axis Factoring extraction method, using a Direct Oblimin rotation method was used. Kaiser's criterion (Eigenvalues greater than 1) was used to establish the number of meaningful factors to extract. The Direct Oblimin rotation used an oblique technique which allows for correlations between the components (Pallant, 2011). To determine whether factor analysis is appropriate, the Kaiser-Meyer-Olkin (KMO) measure of Sampling Adequacy value should be  $\geq 0.6$  and the Bartlett's Test of Sphericity value should be significant (i.e.  $p < .05$ ) so indicting the factorability of the data (Pallant, 2011).

When considering which items to retain, the following inclusion criteria was used: items with factor loadings equal or greater than 0.30 were removed, also if the difference in factor loadings across factors was equal to or less than 0.25 indicating cross-loading. Any item that did not meet the inclusion criteria was deleted and a further round of factor analysis conducted. This process was repeated until a final or so-called clean factor structure was attained.

Internal consistency was assessed by calculating the Cronbach's alpha coefficient. Pallant (2011) suggests that a Cronbach's alpha coefficient of greater than .70 indicates satisfactory internal consistency i.e. indicates that the scale is considered a reliable measure of the construct.

### **Total rewards**

KMO was found to be .82 (i.e. above the cut off of .60) and the Bartlett's Test of Sphericity was significant ( $p < .01$ ) indicating the factorability of the data. Applying the inclusion criteria (as described above), the third round of EFA was accepted to be the final factor structure for the total rewards sub-scale. Five factors emerged that explained 59.25% of the total variance: factor 1 (Eigenvalue = 5.08) explained 26.72% of the variance, factor 2 (Eigenvalue = 2.10) explained 11.03% of variance, factor 3 (Eigenvalue = 1.71) explained 9.02% of variance, factor 4 (Eigenvalue = 1.24) explained 6.53% of the variance and factor 5 (Eigenvalue = 1.13) explained 5.95% of the variance. Table 2 (below) summarises the factor loadings of the items as they loaded on the five factors that emerged. Considering the items that loaded on each of the factors, the factors were labelled: Learning and Career Opportunities, Work-Life Balance, Challenging Work, Financial Rewards and Employee Benefits.

It is noted that items originally classified under career advancement and learning opportunities merged. Work-life balance items, although originally designed to assess a single factor, seem to split into two i.e. organisational climate and practices. Organisational practices include flexible work arrangements and the employer's support of a balanced lifestyle. It can be argued that organisational practices lead to the creation of an organisational climate (e.g. supportive colleagues which make the work load bearable). An item which was originally classified under performance feedback also merged with employee benefits.

**Table 2****Factor Analysis for Total Rewards Scale**

Pattern Matrix	1	2	3	4	5	
The opportunities offered to you by your company for training within your current job e.g. skills training	.767					
The extent to which your employer respects differences between race, gender and age	.592					
Opportunities offered by your employer for learning and career development outside of your current job e.g. sabbaticals, coaching, mentoring, leadership training	.763					
Opportunities offered by your company for career advancement e.g. job advancement/ promotions, internships and apprenticeships with experts	.607					
The extent to which your employer supports a balanced lifestyle between your work and your personal life		.721				
Your employer's provision of work/life programmes such as flexible working arrangements, flexible hours		.698				
Having a manageable workload		.719				
Having a reasonable work space		.524				
Having supportive colleagues		.494				
The extent to which you believe your work and contribution is valued			.794			
The level of challenge and interest you derive from your job			.830			
The extent to which you believe you are provided with challenging targets			.711			
The provision of a competitive pay package (i.e. basic salary plus benefits, allowances or variable pay				.810		
Your employer's provision of incentive bonuses/ variable pay				.761		
Your employer's provision of health and wellness programmes e.g. Employee Assistance Programmes, counselling services, fitness centres					.541	
Your employer's provision of medical aid, retirement and pension benefits					.370	
The provision of recognition via non-financial means e.g. certificates of recognition					.740	
Financial recognition provided by your employer e.g. such as cash, paid travel					.578	
The quality of performance feedback and performance discussions you have had with your supervisor					.551	
Eigenvalues		5.08	2.1	1.71	1.24	1.13
Percentage variance explained		26.72%	11.03%	9.02%	6.53%	5.95%
Principal Axis Factoring Direct Oblimin with Kaiser Normalisation						

### **Intention to stay**

KMO was calculated to be .76 (i.e. above the cut off of .60) and the Bartlett's Test of Sphericity was significant ( $p < .01$ ) indicating that it would be appropriate to conduct factor analysis on this data. A single factor emerged with an Eigenvalue of 2.21, which explained 55.33% of the variance in intention to stay. Acceptable factor loadings were obtained for all the items (.68<r>.79). Considering the items, it was appropriate to label the factor intention to stay. Table 3 (below) summarises the results of the factor analysis for the intention to stay sub-scale.

**Table 3**

#### **Factor analysis for intention to Stay Scale**

<b>Pattern Matrix</b>	
As far as I can see, I intend to stay with my current company.	.792
I will stay at this company even if other companies offer me higher pay and position	.765
It is very important for me to spend the rest of my career in this company	.738
I would turn down a job offer from another company if it came tomorrow	.676
Eigenvalue	2.21
Percentage Variance	55.33%
Extraction Method: Principal Axis Factoring	

### **Affective commitment**

KMO was found to be .82 (i.e. above the cut off of .60) and the Bartlett's Test of Sphericity was significant ( $p < .1$ ). One factor was found to have an Eigenvalue of 2.97 (i.e. greater than 1) and this factor explained 49.43% of the variance. The lowest factor loading of (.57) was revealed by item 1 and the highest factor loading of (.84) was item 4. The affective commitment scale is unidimensional and it can be concluded that it measures the actuarial resources affective commitment. Table 4 below shows factor loadings for affective commitment scale

Using principal axis factoring, all the six items were assessed and confirmed a single factor

**Table 4****Factor analysis for Affective Commitment Scale**

<b>Pattern Matrix</b>	<b>1</b>
I do not feel emotionally attached to this organisation	.844
This organisation has a great deal of personal meaning for me	.794
I do not feel a strong sense of belonging to my organization	.697
I do not feel like part of the family at my organisation	.641
I really feel as if this organisation's problems are my own	.634
I would be very happy to spend the rest of my career with this organisation	.568
Eigenvalue	2.97
Percentage Variance	49.43%
Extraction Method: Principal Axis Factoring	

**Job Satisfaction**

Using principal axis factoring, all six items were assessed confirmed a single factor. The KMO was .86, above the cut off of .60 and the Bartlett's Test of Sphericity was significant ( $p < .000$ ). The factor revealed an eigenvalue of 3.17 and explained 52.90% of the variance in job satisfaction. The lowest factor loading of (.52) was seen in item 4 and the highest factor loading of (.82) was item 6. The job satisfaction scale is unidimensional and can be said to measure the actuarial resources job satisfaction. Table 5 below shows the factor loadings for the job satisfaction scale

**Table 5****Factor Analysis for Job Satisfaction Scale**

Code	Pattern Matrix	1
JS6	I feel fairly well satisfied with my job	.817
JS5	Most days I am enthusiastic about my job	.806
JS1	I find real enjoyment in my job	.784
JS2	I like my job better than the average person does	.752
JS3	I am seldom bored with my job	.637
JS4	I would not consider taking another kind of job	.521
Eigenvalue		3.17
Percentage Variance		52.90%
Extraction Method: Principal Axis Factoring.		

Note. JS = Job Satisfaction

**Reliability Analysis**

Table 6 (below) summarises the Cronbach alpha coefficients that were calculated for all sub-scales scales. Satisfactory levels of internal consistency was found for all the sub-scales, with the lowest Cronbach alpha being  $\alpha = .629$  and the highest being Cronbach  $\alpha = .856$ .

**Table 6****Cronbach's alpha score for measurement scales**

Scale	Cronbach's $\alpha$
Learning and career opportunities	0.753
Work-life balance	0.659
Challenging work	0.741
Financial Benefits	0.629
Employee Benefits	0.728
Intention to stay	0.827
Affective commitment	0.849
Job satisfaction	0.856

Based on the basket of evidence presented above, it was assumed that all the sub-scales had demonstrated unidimensionality and the data obtained using them appropriate for use in further statistical analyses.

### Descriptive Statistics

The means and standard deviations of the various sub-scales i.e. total rewards dimensions, affective commitment, job satisfaction and intention to stay are summarised in Table 7 (below).

Amongst the total rewards dimensions, financial benefits are rated the most important in intention to stay of actuarial resources ( $M=4.49$ ,  $SD=0.626$ ) having the highest mean. Challenging work, work-life balance, learning and career opportunities respectively have high means. Employee benefits were rated lowest ( $M=3.39$ ,  $SD=0.774$ ) on the total rewards dimensions in terms of its importance in intention to stay. Affective commitment has a moderate score of ( $M=2.92$ ,  $SD=0.450$ ) and intention to stay has the lowest score of ( $M=2.53$ ,  $SD=0.913$ ). This suggests that actuarial resources have moderate commitment towards their organisation and moderate intention to stay.

**Table 7**  
**Descriptive Statistics for all Sub-Scales (n=135)**

Variable	Minimum	Maximum	Mean <sup>1</sup>	Std. Deviation <sup>1</sup>
Financial benefits	1.50	5	4.49	.626
Challenging work	1.33	5	4.34	.567
Work-life balance	2.40	5	4.11	.545
Learning and career opportunities	1.75	5	4.03	.790
Job satisfaction	1	5	3.5	.746
Employee Benefits	1.20	5	3.39	.774
Affective commitment	1	4.5	2.92	.450
Intention to stay	1	4.5	2.53	.913

<sup>1</sup>Response scales ranged from 1 - 5



Amongst the total rewards dimensions, financial benefits were numerically rated the most important ( $M=4.49$ ,  $SD=0.626$ ) i.e. having the highest mean. Employee benefits were mean score was rated the lowest ( $M=3.39$ ,  $SD=0.774$ ) of the total rewards elements It is noted that the means for the total reward elements are similar and all quite high. This is not uncommon when surveying respondents on how important the various reward elements are for them in the absence of any competitive forces.

Affective commitment was found to have a moderate mean score of ( $M=2.92$ ,  $SD=0.450$ ) i.e. on a 5-point scale and intention to stay has the lowest mean score of ( $M=2.53$ ,  $SD=0.913$ ) i.e. under the mid-point (=3). These results seem to suggest that respondents had moderate or neutral levels of commitment towards their organisation and intention to stay.

### **Correlation Analysis**

Pearson Product-Moment correlation coefficients were calculated to determine the strength and the direction of the relationship between the variables. To qualitatively interpret correlation coefficients, Cohen (1988) guidelines were used, in other words:

- Small correlation:  $r = .10$  to  $r = .29$
- Medium correlation:  $r = .30$  to  $r = .49$
- Large correlation:  $r = .50$  to  $r = 1.0$

The Pearson Product-Moment correlation coefficients are summarised in Table 8 (below).

**Table 8**  
**Correlation Matrix**

	1	2	3	4	5	6	7	8
1 Learning and career opportunities		.252**	.378**	.332**	.594**	-.050	-.087	-0.096
2 Work-life balance			.224**	.241**	.274**	.058	-.136	-0.051
3 Challenging work				.186*	.337**	.053	.071	0.148
4 Financial benefits					.411**	-.161	.009	-0.145
5 Employee Benefits						.076	-.088	-0.139
6 Affective commitment							.034	.218*
7 Job satisfaction								.579**
8 Intention to stay								

\*p < 0.05 level (2-tailed). \*\*p < 0.01 level (2-tailed).

The correlation in Table 8 indicates that intention to stay has the strongest association with job satisfaction ( $r = .579$ ,  $p < .01$ ) followed by affective commitment with a weak association ( $r = .218$ ,  $p < .01$ ). All the total reward elements did not have a significant relationship with intention to stay.

### Regression Analysis

Regression analysis can be used to test the predictive power of a set of variables and to assess the relative contribution of each individual variable (Pallant, 2011).

Multiple hierarchical regression analyses were used to assess:

- if a model consisting of the independent variables, collectively, was able to significantly predict variance in the dependant variable intention to stay;
- which independent variable/s in the regression model explained unique variance in intention to stay; and
- whether the total rewards dimensions could predict variance in the dependant variable intention to stay, when the variance of affective commitment and job satisfaction are controlled for.

The major assumptions that need to be taken into account when conducting multiple regression are:

1. **Variable type.** All predictor variables, in this case the total rewards dimensions, affective commitment and job satisfaction must be categorical or interval scaled. Similarly, the outcome variable (intention to stay) must be continuous and unbounded. Field (2013) explains that unbounded means that there are no constraints on the variability of the outcome variable. In the present study interval data was collected so all variables are considered to be continuous, therefore having met this assumption.
2. **No multicollinearity.** Multicollinearity exists when there is a strong correlation between two or more predictors in a regression model and this poses a problem because simple regression requires only one predictor (Field, 2009; Pallant, 2011). Perfect collinearity between predictors makes it impossible to attain estimates of regression co-efficients as there are many possible numbers of combinations of coefficients that would work equally well, and then the values of b for each variable are interchangeable. Predictor variables should not have high correlations as there should be no perfect linear relationship between two or more of the predictor variables (Field, 2009).

The Variance Inflation Factor (VIF) was determined for each predictor variable in order to ensure the assumption of multicollinearity was not violated. Field (2009) suggests that the VIF score should be below 10. The VIF scores for the predictor variables indicated that this assumption was not violated as would have been expected given the low to moderate bivariate correlations between the variables. Additionally the tolerance score is related to the VIF score as it is the reciprocal of the VIF score (Field, 2009). If tolerance is below .20 it is indicative of a potential problem. Considering that the tolerance scores for the predictor variables are all above .20, it was assumed that there are no issues with tolerance and that the assumption of multicollinearity was not violated (see Table 9 below).

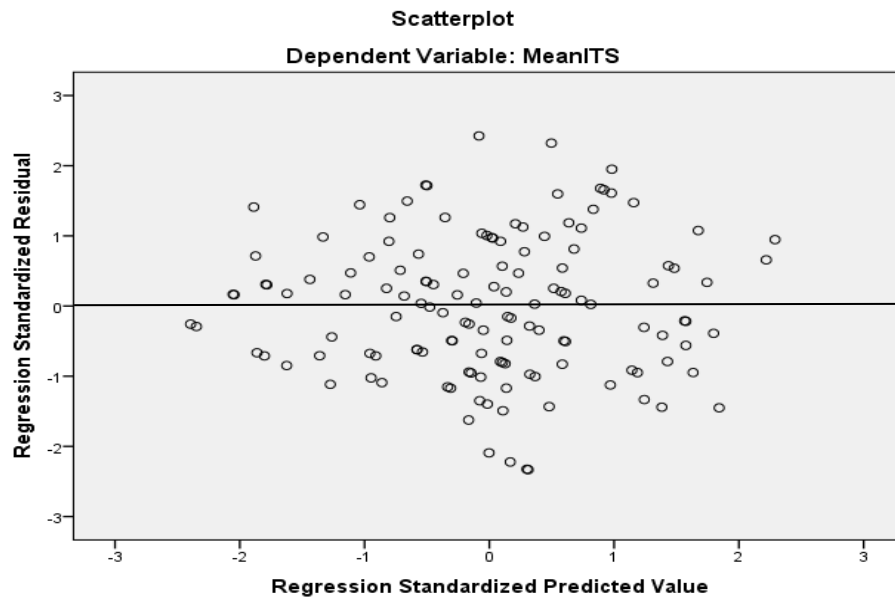
**Table 9**

**Variance Inflation Factor Scores and Tolerance Scores for Predictor Variables**

Predictor variables	Outcome variable	
	Intention to Stay	
	VIF	Tolerance
Learning and career opportunities	0.598	1.671
Work-life balance	0.858	1.165
Challenging work	0.805	1.242
Financial benefits	0.779	1.283
Employee Benefits	0.576	1.737
Job satisfaction	0.954	1.049
Affective commitment	0.955	1.047

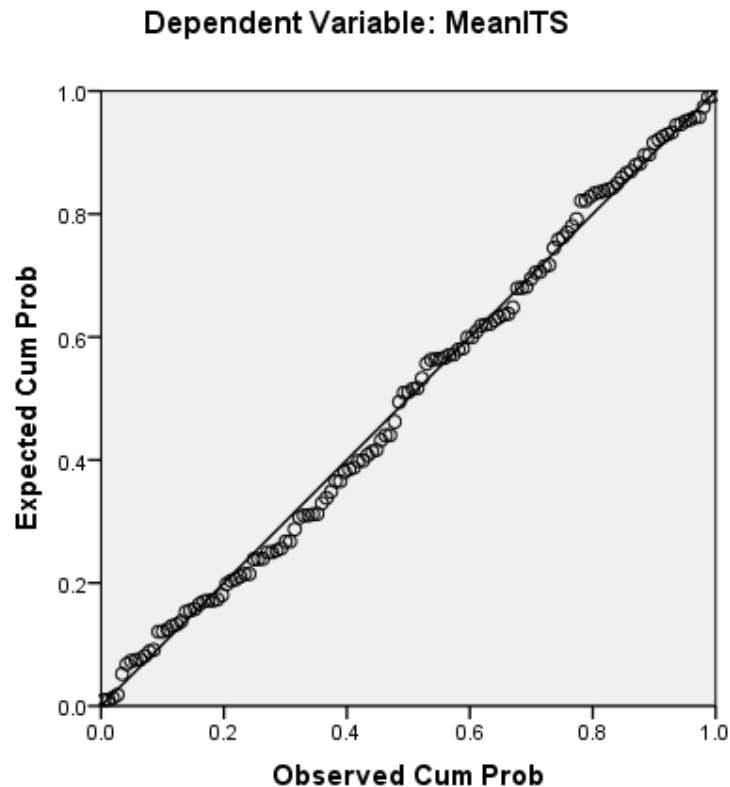
3. **Homoscedasticity.** Pallant (2011) suggested that variance of residuals about the predicted dependent variable scores should be the same for all predicted scores. Homoscedasticity is determined by considering the distribution of the differences that exist between obtained and predicted dependent variable values, i.e. the residuals. Homoscedasticity is given if these values have equal variance at each level of the independent variable (Pallant, 2011).

This assumption was tested using a scatterplot depicting the standardised predicted scores against the standardised residuals. The scatterplots for intention to stay (see Figure 3 below) indicates that homoscedasticity could be assumed as the flat line of best fit which revealed that the variance of residuals was constant.



**Figure 3.** Variance for residuals intention to stay

4. **Normally distributed errors.** Residuals in the model should be normally distributed with a mean of zero in order to conduct regression analysis (Field, 2009). Consequently, the sum of the differences between the predicted and the observed data should equal zero (Field, 2009). Thus the normality of residuals was tested using normality probability plots. Consideration of the normality probability plots for the sample data showed no extreme deviations for intention to stay (see Figure 4 below). This assumption of normally distributed errors was therefore met in the data obtained from the sample.



**Figure 4.** Normality Plot Intention to Stay

The assumptions for conducting regression analysis were believed to have been fulfilled and the analysis was then conducted.

A two stage multiple hierarchical regression analysis was conducted with intention to stay as the dependent variable. Affective commitment and job satisfaction were entered as model one of the regression analysis to control for these responses. These two variables together accounted for 37.5% of the variance in intention to stay. Model two consisted of the total rewards dimensions and when added the complete model accounted for 41.1% of the variance.

The hierarchical multiple regression revealed that at stage one, affective commitment and job satisfaction contributed significantly to the regression model,  $F(2,132) = 39.58, p < .001$  and

accounted for 37.5% of the variation in intention to stay. Both affective commitment ( $\beta = .403$ ,  $t = 2.886$ ,  $p < .001$ ) and job satisfaction ( $\beta = .7$ ,  $t = 8.313$ ,  $p < .001$ ) were found to further predict unique variance in intention to stay.

The results indicated that after step two, adding total rewards dimensions variable ( $\beta = -.933$ ,  $t = -10.95$ ,  $p > .276$ ), the complete model was not significant,  $F(7,127) = 12.64$ ,  $p > .001$ . In the final model, only the measures were statistically significant with the job satisfaction scale recording a higher beta value ( $\beta = .687$ ,  $p < .001$ ) than the affective commitment scale ( $\beta = .330$ ,  $p < .021$ ). The total reward dimensions did not predict unique variance in the intention to stay variable.

### **Mediation**

The hierarchical multiple regression output suggested that there was no relationship between ITS and TR, but there is a relationship between ITS and the two mediators. Further, even after accounting for the variability in ITS due to AC and JS, TR still does not relate to ITS. To evaluate mediation, correlation between total rewards and intention is a precondition (Field, 2012). Based on these results, no mediation analysis was conducted.

### **Best-Worst Scale**

Participants were asked to choose the reward element that would “most likely” and “least likely” influence their decision to stay. This was repeated for 10 different comparison sets. The top ranked and bottom ranked items provide information on ranking choice and therefore preference of total reward dimensions. The total number of times each total reward dimension is chosen as best or worst across all comparison sets is calculated. The figure below (see Figure 5 below) depicts the results.

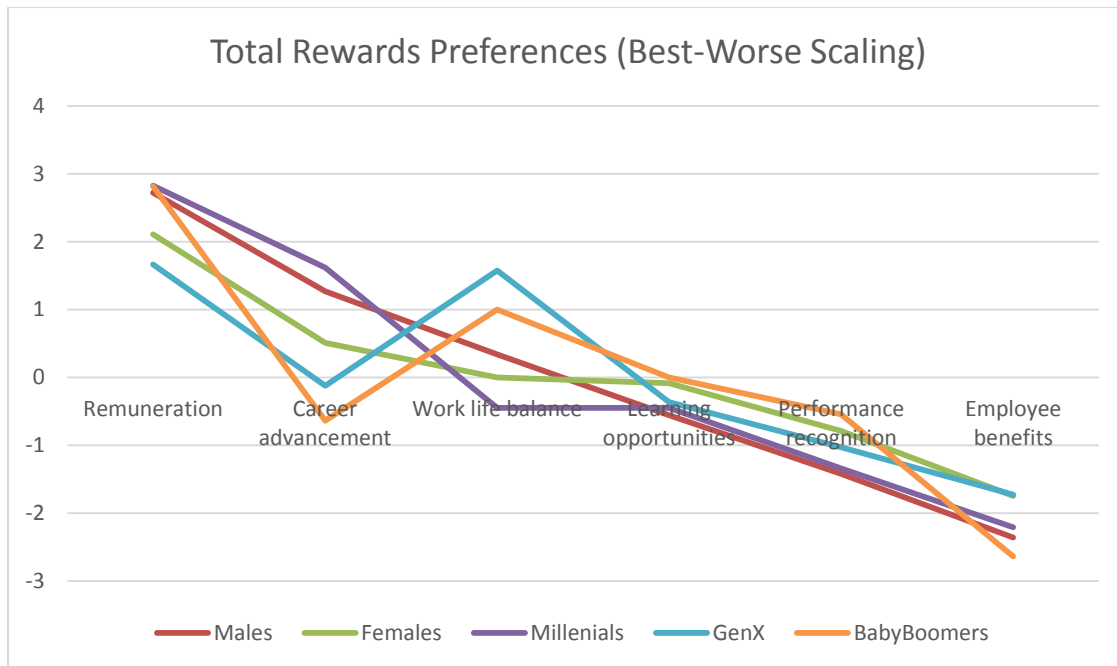


Figure 5. Total rewards preferences for actuarial resources based on Best-Worse scaling

The results suggest that for the overall sample ( $n=135$ ), remuneration was the most preferred total reward dimension ( $m = 2.54$ ) and employee benefits ( $m = -2.126$ ) being the least preferred. Career advancement ( $m = 1.01$ ) and work-life balance ( $m = 0.16$ ) were intermediate at the mid-point, whilst learning opportunities ( $m = 0.393$ ) and performance recognition ( $m = -1.200$ ) on the lower end, respectively.

A comparison across the different groups shows that millennials and baby boomers chose remuneration as the most preferred reward ( $m = 2.82$ ), whilst Generation X (GenX) indicated remuneration as the lowest preference ( $m = 1.67$ ). Career advancement was most preferred by millennials ( $m = 1.62$ ) and least preferred by baby boomers ( $m = -0.64$ ). Work-life balance was most preferred by GenX ( $m = 1.58$ ) and least preferred by millennials ( $m = 0.45$ ). Learning opportunities, performance recognition and employee benefits were found to be the least preferred of the total reward dimensions.

The two most preferred reward dimensions for males were remuneration and career advancement. This was similar for females, but when the scores are compared a numerically



lower mean for career advancement was found compared to that of males. GenX and baby boomers, similarly, most preferred the remuneration and work life balance, whilst the preference for career advancement was negative or least preferred. Table 10 (below) summarises the mean scores for reward preferences as collected using Best-Worse scaling.

**Table 10**

**Best-worst total rewards preference results (ranked from best to worse)**

Total reward dimension	Mean scores								
	Most	Least	Aggregate BWS	Overall	Males	Females	Millennials	GenX	Baby Boomers
<b>Remuneration</b>	409	66	343	2.54	2.72	2.11	2.82	1.67	2.82
<b>Career advancement</b>	293	157	136	1.01	1.27	0.51	1.62	-0.12	-0.64
<b>Work life balance</b>	245	223	22	0.16	0.34	0.00	-0.45	1.58	1.00
<b>Learning opportunities</b>	171	224	-53	-0.393	-0.56	-0.09	-0.45	-0.36	0.00
<b>Performance recognition</b>	135	297	-162	-1.200	-1.42	-0.79	-1.34	-1.03	-0.55
<b>Employee benefits</b>	90	377	-287	-2.126	-2.36	-1.74	-2.21	-1.73	-2.64

**Qualitative data**

To gain a better understanding of total rewards that influence actuarial resources intention to stay, an open-ended question was included in the survey. The objective was to further explore other factors that may be important to participants, but which were not covered in the survey questions.

As summarised in Table 11 (below), participants identified various rewards dimensions that they believe may influence their intention to stay. The most frequently cited reward dimension was long term incentive shares under financial benefits. This was followed by proximity to work, followed by mentorship and study leave that had the same frequency. Other recurring themes included global mobility, organisational culture and flexible leave.

**Table 11**

**Open ended reward dimensions results**

<i>Themes</i>	<i>Frequency</i>
<b>Employee Benefits</b>	
Study leave	4
Sabbatical for long tenure	1
Flexible leave	3
Additional annual leave	2
Maternity leave	1
<b>Financial Benefits</b>	
Long term incentive shares	7
Bonuses	1
Paid study	1
<b>Proximity to work</b>	5
<b>Culture</b>	
Organisational	3
Team	2
<b>Global mobility</b>	3
<b>Mentorship</b>	4

## **CHAPTER 5**

### **DISCUSSION**

It is a key organisational imperative to ensure that their scarce skilled human capital is retained to secure the organisation's competitive advantage (Hendricks, 2006). Issues of retention of actuarial resources in South Africa are of concern as they compose a critical and scarce skill cohort. It is widely acknowledged that in South Africa and globally these professionals are highly mobile and offer skills which are needed for the advancement of the economy (ASSA, 2016; Ramjee et al., 2014; Terblanche, 2009). The financial and non-financial costs associated with the loss of actuarial resources provide an impetus for organisations to understand which combinations of rewards are likely to contribute to their retention. An exhaustive literature review confirmed that little empirical research has been conducted on this professional group despite the much needed skills they have.

The aim of this study was to develop an understanding of the extent to which total rewards contribute to actuarial resources' intention to stay. Based on the findings of the literature review the researcher hypothesised that job satisfaction and affective commitment would mediate between total rewards and intention to stay. The research objectives were studied in two ways; the first used the WorldatWork Total Rewards model to identify which total reward dimensions were valued by actuarial resources and were perceived contributors to their retention or intention to stay; the second used the best-worst scaling which presented a set of three rewards dimensions and forced the respondents to choose the reward mix they believed most likely and least likely influenced their intention to stay. This approach required a different cognitive approach to selecting the top valued and bottom valued reward dimensions.

The discussion below will highlight the study's main findings and discuss the results of the hypotheses as presented in the literature review. The limitations of the study and recommendations for future research are included in this chapter as well as a conclusion to the study.

### **Portability of the measuring scales**

It is important to establish how well the scales measure the defined constructs. In addition, it is also important to understand how well the participants responded to the scales in light of possibly replicating the study.

In the original study by Pregnolato (2010), the reliability co-efficient for the original total rewards scale indicated a Cronbach's alpha range of 0.51 to 0.71. Out of the 4 factors, only performance and rewards ( $\alpha = 0.51$ ) did not meet a good level of internal consistency. This is contrary to the current study in which financial benefits did not meet a good level of internal consistency. Achieving internal consistency is important as it confirms whether the scale measures the same underlying construct (Pallant, 2011). The job satisfaction and affective commitment scales performed well in testing internal consistency and this is similar to what was found in other studies (Bagraim, 2004; Iverson et al., 1998; Kinicki et al., 2013; Kuvaas & Dysvik, 2010; Ma, 2010; Martin & Bush, 2006; Robert et al., 2000). The lower internal consistency of the financial benefits dimension could be explained by the fact that alpha values are sensitive to the number of items in a scale. The financial benefits dimension had a total of two items. Short scales which have items under ten can display low Cronbach values (Pallant, 2011). For the most part the scales used can be considered reliable for the actuarial resources in the South African context.

The results of the factor analysis for the intention to stay, affective commitment and job satisfaction scales show that they were uni-dimensional, loading onto a single factor. Meyer et al., (1993) proposed that a single factor loading was expected for affective commitment which was the case in the current study. No modification was needed for any of these three scales and hence they worked well in the context of this study. However, it is important to recognise the results should be viewed with some caution as Pallant (2011) argues that factors obtained from small samples are less reliable and do not generalise well compared to larger samples. The study had less than 300 cases which are required to make up a large sample (Pallant, 2011). To counter the challenge of a small sample, high factor loadings of .8 would be sufficient for a smaller sample (Pallant, 2011). Most factor loadings in this study were not above .8 therefore there might be variability with the scale's performance if it used on a different sample.

The total rewards scale did not work as expected. The financial rewards and non-financial rewards were expected to have distinct factor loadings clearly differentiating the total rewards dimensions that influence intention to stay. This outcome on the total rewards scale can possibly be attributed to the small variation in the mean of the total reward dimensions. It seems that every participant wants all the benefits suggested in the scale.

The results of the factor analysis of the total rewards dimensions produced an interesting set of dimensions for the researcher to work with. The emergent dimension: challenging work, also gave insight into what rewards actuarial resources value. Challenging work is regarded as an important factor to retain knowledge workers and highly skilled professionals and this is supported by various researchers (George, 2013; Horwitz, Heng & Quazi, 2003; Ramlall, 2004; Sutherland, Torricelli & Karg, 2002; Sutherland & Jordaan, 2004). Challenging work opportunities leading to career growth is rated one of the most desired attributes for individuals with critical skills to join and stay in a company (Sutherland et al., 2002). Since the scale did not work well, the more interesting results were those generated from the best-worst scale.

### **The Best-Worst scale**

The best-worst scale provided a different lens to analyse the research results with different patterns from the total rewards dimensions scale. This shift in focus enabled an analysis of the rank order of the total rewards dimensions. This approach addresses the shortcomings of the survey method through using choice rather than preference (Finn & Louviere, 1992). The best-worst scale provided better discrimination amongst the total rewards dimensions rather than the total rewards scale dimensions. Best-worst results therefore discriminated between the total rewards dimensions that influence intention to stay amongst the different respondent groups.

### **Open-ended question**

The open-ended question was posed to elicit any further insights into the rewards that the participants might value but were not included in the survey. The open ended question was

optional and therefore attracted a very small number of responses. The responses yielded very low frequencies and didn't deliver significantly different results. Of interest to the researcher were two factors which were not in the questionnaire, proximity to work and global exposure, which will be briefly discussed below.

## **Predictors of Intention to Stay**

### **Total Rewards that retain actuarial resources**

#### **Hypothesis 1**

Total rewards positively influence intention to stay in actuarial resources

The hypothesis was rejected. As reported above, the traditional dimensions of rewards associated with intention to stay do not influence participants' intention to stay in their current employment. This makes this particular group ambiguous and difficult to strategise around retention.

Literature shows that financial rewards, the elements of monetary compensation, are important for talent attraction and retention (Bussin, 2002; Moore & Bussin, 2012; Schlechter et al., 2014). However, contrary to expectations, these rewards amongst this sample do not influence intention to stay. Other studies found that high remuneration, benefits, variable pay, work-life balance, performance management, career opportunities, influenced retention of knowledge workers (Bussin & Smit, 2013; Pregolato et al., 2017; Schlechter et al., 2014; Smit, Stanz & Bussin, 2015; Terblanche, 2009; Van Dyk & Coetzee, 2012). This is also confirmed in studies by Higginbotham (1997) and Kochanski and Ledford (2001) who found that pay satisfaction and a competitive salary positively influence intention to stay. So it is interesting that this group of knowledge workers are different from other samples that would be retained by possibilities of high remuneration.

A possible reason for the findings could be that actuarial resources are guaranteed of above average salaries wherever they might be employed so staying in any particular organisation for this is not necessary (Chu et al., 2010). Being a scarce skill with the possibilities of high

and competitive remuneration probably increases chances of movement for other factors as career advancement.

## **Hypothesis 2**

The two hypotheses were not tested after the factor analysis failed to distinguish between financial and non-financial rewards. Therefore both hypotheses are rejected.

## **Hypothesis 3**

Affective commitment mediates the relationship between total rewards and intention to stay amongst actuarial resources.

This hypothesis is rejected. It was expected that affective commitment would be positively related to intention to stay amongst actuarial resources. This mediator was utilised in the study because literature suggests that it is a strong predictor of intention to stay (Allen et al., 2003; Meyer & Herscovitch, 2001). Employees with high levels of affective commitment are expected to have increased likelihood of staying with their organisation (Cho, Johanson & Guchait, 2009). Contrary to expectation, affective commitment did not mediate the relationship between total rewards and intention to stay. The participants reported affective commitment as present but it somehow does not influence their continuance of tenure in current organisation. This finding differs from that of Dockel, Basson and Coetzee (2006) who found that remuneration had a strong significant relationship with affective commitment and increased intention to stay.

Instead of affective commitment towards their organisations, other studies found that actuarial resources in South Africa have a strong sense of affective and continuance commitment towards their profession (Bagraim, 2003; Mokonyane & Ramjee, 2014). To foster affective commitment in professional employees, Cho and Huang (2012) proposed that organisations had to continuously make them aware of the value they contribute to the

organisation. This would be a possible way to increase affective commitment in the actuarial resources cohort.

Although affective commitment is related to intention to stay, it did not mediate the relationship between total rewards and intention to stay.

#### **Hypothesis 4**

Job satisfaction mediates the relationship between total rewards and intention to stay amongst actuarial resources

Hypothesis 4 is rejected. It was expected that job satisfaction would be positively related to intention to stay of actuarial resources. This mediator was included because of numerous studies that support that job satisfaction is a significant predictor of intention to stay (Aydogdu & Askigil, 2011; Coomber & Barriball, 2007; Ghosh et al., 2013; Radebe & Dhurup, 2014). The actuarial resources report to have job satisfaction but it does not increase their intention to stay. When the mediation analysis of job satisfaction was introduced between total rewards and intention to stay, the results were not significant. Aydogdu and Askigil (2011) reported that level of pay, opportunities for career and learning opportunities, the type of work and leadership style influence job satisfaction. Lu et al., (2005) also articulated that critical to ensuring job satisfaction is to meet employees expectations. The total rewards survey measured how important the rewards dimensions were in influencing their intention to stay. It did not necessarily check whether the participants were satisfied with the rewards presented to them.

Although job satisfaction is related to intention to stay, it did not mediate the relationship between total rewards and intention to stay.

#### **Group differences in response patterns**

This section contains different and interesting results revealing differences in the reward preferences by generation and gender.



## **Generational differences**

The BWS results show that there are differences in reward preferences among the generational groups. Millennials most preferred rewards are remuneration and career opportunities. GenX top most preferred results are remuneration and work-life balance and for the baby boomers it is also remuneration and work-life balance. These differences are worth exploring as they provide a different alternative to the survey results and possible ways to determine reward preferences for the cohort.

### **Importance of remuneration**

Remuneration dimension remains the top most preferred reward dimension regardless of generation. Similar research found that monetary components of reward strongly influenced decisions to join a company and decisions to stay with the company (Bussin & van Rooy, 2014). This finding is supported by a South African study of professionals in a financial organisation where significant reward preferences were found across generational cohorts with remuneration mostly at the top (Bussin & van Rooy, 2014). Another study also found that financial rewards were the most important total rewards dimension which would influence the retention of different generations (Pregolato et al., 2017).

Although remuneration is consistently the highest preferred reward across all three groups, millennials and baby boomers scored higher than GenX. This confirms results from another study that remuneration and variable pay were top factors that retain millennials (Bussin, 2002). This preference can be attributed to the fact that millennials are starting out in their careers and hence need disposable cash to build their lives. Further, millennials prefer financial rewards which they perceive to be practical and they want them instantly (Bussin & Fletcher, 2008; Colon, 2005; Lancaster & Stillman, 2002; Ruch, 2000; Roy, 2008). Millennials are retained by organisations which enable them to pursue a lifestyle of their choice through perceived adequate financial rewards.

**Importance of career advancement**

In the current study, 60.7% of the participants had been with the current employer for less than five years and reported low intention to stay. 67.4% of the participants in the current study are young (21 – 34 years). Millennials rated career advancement highly compared to the rest of the participants. This is consistent with the findings by Chu et al., (2010) who suggested that actuarial graduate employees stayed with their employer for just over three years on average and left for better career opportunities. They are in the process of developing their careers so they will seek and will pursue these opportunities (Chu et al, 2010). Millennials are in the early stages of their career, providing them with challenging opportunities for growth and advancement can possibly influence their intention to stay. This is because prospects for career advancement opportunities are regarded to be good (Chu et al, 2010).

Unlike the millennials, GenX and baby boomers do not have a preference for career advancement as a reward dimension that would influence their intention to stay. The baby boomers are in the later stages of their career and possibly preparing for retirement. However, GenX are in the middle of their career and possible advancement is assumed to be valued. GenX might therefore be at a life stage which demands a different focus, either established or satisfied by their career advancement or just not enough time and too much work (SAAJ, 2014).

**Importance of work-life balance, employee benefits and learning opportunities**

GenX have the highest preference for work-life balance. Baby boomers follow GenX closely on preference for work-life balance. This is unlike the millennials who are focussed on growing their careers and report no need for work-life balance. Nordenfelt (1993) had similar findings that GenX have a high preference for flexibility due to personal and other life commitments.

Employee benefits are ranked lowest by all three generation groups. Millennials ranked benefits lowest as they seek instant rewards and to establish their careers (Bussin & Fletcher, 2008; Colon, 2005; Lancaster & Stillman, 2002). These findings are supported by previous

research on knowledge workers in South Africa (Pregnoiato, 2010). Sutherland and Jordaan (2004) also found that benefits were ineffective in retaining knowledge workers. The participants' results on employee benefits can be attributed to different factors. Actuarial resources have a superior understanding of benefits, risk mitigation, minimization of the negative impacts of specific risks on an institution, understanding the impact of different investments on pension funds risk and returns (ASSA, 2016; Chu, Evans & Morgan, 2011; Wilmot 2011). They have the ability to quantify unclear numbers for individuals and organisations to safeguard their financial future because of their unique innovative and numerate skills (ASSA, 2016). They are aware of the economic challenges in South Africa and are aware of the need to have adequate benefits as retirement and medical aid as the state funded system is inadequate. This knowledge enables them to diversify their savings and incur better returns than the traditional organisational benefits.

Baby boomers are the oldest generation amongst the participants and yet they ranked employee benefits lowly. This is contrary to literature which found that employee benefits such as retirement and medical aid are valued by baby boomers (Bussin, 2002, Tiku, 2007). It must be noted that baby boomers value remuneration and this contributes to their medical aid and retirement fund.

Learning opportunities, performance recognition and employee benefits reward dimensions are the least preferred by the actuarial resources. They have negative frequencies emphasising that they were chosen as least preferred by the actuarial resources. Literature suggests that actuarial resources engage with continuous professional development (CPD) which is mandatory and regulated by the professional body (SAAJ, 2014). Thus, the GenX and baby boomers still participate in cycles of ongoing learning as required by their professional body. Therefore they might not have need for further learning opportunities from the organisation as it is adequate.

## **Gender differences**

Both males and females value remuneration and ranked it highest. Males however ascribed a slightly higher preference for remuneration than females as part of the total rewards mix. This could be attributed to males being traditionally bread-winners and thus having a higher source of income and benefits. Current employment laws are addressing these disparities through equity laws such as equal pay for equal pay. This is contrary to findings which showed that women have a stronger preference for remuneration and benefits than their male counterparts (Nienaber, Bussin & Henn, 2011).

Career advancement is ranked higher by males than females. This can be ascribed to the dominance of males in the South African actuarial profession with a smaller representation of women at an average 30% (Ramjee, Sibiya & Dreyer, 2013). It is therefore possible that women might still find advancing their careers in this environment challenging. There are also traditional perceptions about male and females roles which may play into the work-place challenges women face. The negative stereotypes of women pursuing actuarial qualification and roles have a negative impact on women's performance and career advancement (Ramjee et al., 2013). This also impacts the lower enrolment of women to pursue a career in the actuarial profession. Employers have a role to play to support career advancement for women in the actuarial profession.

There is a low preference for work-life balance between males and females. This finding is contrary to research which has shown that knowledge workers placed great value on work-life balance (Pregnolato, 2010). However, males reported a slightly higher preference for work-life balance over women. A general perception is that women might need this more than men especially those who have younger families. However, this finding can be assigned to women's drive to ensure equity with their male counterparts in the actuarial profession in South Africa (Ramjee et al., 2013).

## Open ended question results

The low responses did not yield much new information but two interesting factors which did not feature in the literature review were noted. Some participants suggested additional rewards that would positively influence their intention to stay namely proximity to work and global mobility.

Proximity to work is a dimension added to the open-ended question. This possibly arises from a need to travel short and quick distances to work. Large cities experience traffic congestion in the mornings and evenings when people commute to work posing a stressful experience for daily commuters (Duczynski, 2018). In some South African cities, travel by private car also incurs an e-toll fee for road maintenance. Although the organisation does not determine where its employees choose to live, they may alleviate the challenge of spending additional time in traffic congestion through various flexible work arrangements. These flexible arrangements include tele-work, work from home or flexi time benefitting both employees and organisations (Badenhorst, 2018).

Global mobility or international exposure was also identified as a reward that can possibly influence intention to stay in the current study. Giving employees such an opportunity is plausible if the organization has offices internationally and there is room for that type of work. If not, this is a challenge and may lead to loss of skilled resources. Ramjee et al., (2014) found that there is increased mobility of actuarial resources through emigration due to globalization. The South African qualification is also globally recognised, thus opening many career possibilities locally and abroad (ASSA, 2016). This is supported by a study which found that other than the poor socio-economic conditions of South Africa, global developments were creating international demand leading to emigration of actuaries and actuarial students creating shortages and a tight actuarial resource market (Terblanche, 2009). The opportunity to earn more is also presented by global opportunities especially in the current economic and political instability in South Africa.

In conclusions, Pregnolato et al., (2017) suggests that employees who are offered rewards that are aligned with their preferences are likely to stay longer in their organisations. The challenge is for organisations to identify the right reward preferences for the actuarial resources cohort. Customized reward packages that suit employees and the employer will increase retention and engagement (Bussin, 2002; Pregnolato et al., 2017). Customizing reward preferences according to the generational preferences would enable an innovative approach to talent retention. However, organisations who wish to take this step would need some empirical data to enable robust reward strategies that enable their talent retention strategies.

### **Study Limitations and Suggestions for Future Research**

The section will review the limitations of the study with proposed recommendations for future research stated after each limitation.

The main limitation of this study is that little is known about actuarial resources in South Africa. There is limited information on this cohort to draw from. This is unusual as there is clearly a scarcity of this resource in South Africa yet limited research has been done on this cohort. A single study was found which focused on demand for actuarial resources in South Africa (Terblanche, 2009). Although they are a small population in South Africa, they have an important skills set worthy of focussed study and interventions. A suggestion for future research would be a follow up study on factors that retain this cohort as this could be beneficial to organisations that hire these skills.

Another limitation is the sample size ( $N = 135$ ) which is 4% of the total actuarial resources in South Africa who were 3288 as of April 2016 (ASSA, 2016). A bigger sample can provide more insights into the nature of rewards that influence intention to stay. Larger samples provide the room for generalizability to the total population as they represent a more diverse group (Pallant, 2011). A suggestion for future research could be a bigger study designed and implemented by ASSA as they have access to all actuarial resources in the country.

A further limitation was the use of the survey method which was used for data collection which enabled the researcher ease of access to the sample (Salkind, 2012). However online surveys are limited in that the only data received is from the constructs in the survey (Babbie & Mouton, 2008). A suggestion for future research is to conduct structured interviews where one can do in-depth interviews with a smaller group of participants. More information could be gathered through the interviews and focused group discussion on the specific reward dimensions which are not in conventional models as WorldatWork total rewards model.

A key limitation is that the total rewards scale did not perform as expected and resulted in insufficient variability amongst participants' reward elements preferences. The survey is the dominant instrument used in data collection in the field of psychology; however it was not the most effective tool to use in the study. Other alternatives can be considered for future research such as conjoint analysis. Conjoint analysis is a survey based technique used in market research that aids to determine how customers value different features of a product. Individuals perceive products as consisting of various attributes of which each has a measure of value. The relative worth of each attribute making up a product is identified through conjoint analysis (Cattin & Wittink, 1982). Using this approach will enable participants to rank their preferred combination of total reward elements. This could potentially highlight more insights on how to retain this cohort.

The study was based on a cross sectional study which provides information of subjects in relation to the measured constructs at a specific point in time (Babbie & Mouton, 2008; Salkind, 2012). The cross sectional approach also limits establishing causal relationships between variables thus only relationships are inferred than established (Coetzee & Schreuder, 2009). This is limiting as results are only valid for that specific time. To counter this challenge, it is ideal to use a longitudinal study. The longitudinal studies are conducted at more than one point in time to enable an understanding of changes over an extended period (Salkind, 2012). A longitudinal method in this study could enable the researcher to determine whether over time, total rewards factors associated with intention to stay of actuarial resources remains constant or change. This research however did not seek to establish causality therefore a cross sectional design was used in order to understand the intention to stay of actuarial resources.

A suggestion for future research could be to do a longitudinal study to analyse the changes over time of rewards preferences of actuarial resources. Chu et al., (2010) suggested that in the first few years of actuarial graduates' careers, they are mainly concerned with career development opportunities and good growth opportunities. However in later years they place more emphasis on work life balance, geographic location of employer and job autonomy. An understanding of this could be accomplished by using a longitudinal study.

### **Implications of the Present Study**

Despite the limitations of this study, the present study highlights the importance of understanding the rewards that organisations could use to influence intention to stay of actuarial resources. The results of the study add to the little knowledge available on actuarial resources in the South African context as there is limited literature on actuarial resources in South African organisations. The under-researched cohort is a critical skill in South Africa and this study may lead to more curiosity in finding the unique factors that influence their intention to stay.

Bussin and Toerin (2015) suggested that financial rewards, recognition and developmental opportunities were important rewards in retaining talented workers in the science, technology, financial services and information technology. Although actuarial resources are talented workers mainly found in financial services, financial rewards do not seem to stand out as influencing intention to stay. The actuarial profession generally guarantees good remuneration (Chu et al., 2010; Terblanche, 2009) and this could be the reason the cohort might prefer other forms of non-financial rewards which might not all have been covered in this study. It is worth exploring these. There is a possibility of different contractual agreements with the various generations in this cohort to cater for rewards that retain them. Organisations would need to be creative and move from the standard employee benefits if they do not serve the attracting and retaining purposes.



## **Conclusion**

The study articulated the need to look into the actuarial resources talent in South Africa working in different organizations and determine which total rewards would influence their intention to stay. Although the model has limitations, this provided useful results to use in further research. It was stated that the need to retain actuarial resources is important as they are a scarce skill who make significant contribution in organization. However, the challenge to retain actuarial resources is well-known given their moderate to low intention to stay results.

Using the total rewards model, factors which were perceived would contribute to intention to stay were selected. These factors included financial and non-financial rewards which are known to influence general employee's intention to stay. However the actuarial resources cohort is different from the general employees because of their technical expertise and thus organisations are challenged with retention. The results of this study found that offering actuarial resources total rewards (remuneration, employee benefits, work-life balance, learning opportunities, career advancement and performance recognition) did not increase their levels of intention to stay. It was also found that job satisfaction and affective commitment did not mediate the relationship between the total rewards dimensions and intention to stay. However, job satisfaction and total rewards are positively correlated with intention to stay. Organisations in South Africa should therefore consider which other rewards dimensions are important to this cohort which can possibly increase intention to stay.

It is important for organisations to be aware of the total rewards dimensions that retain the various demographic groups. Business and human resources leaders would need to keep updated on the unique demands of actuarial resources for them to be able to influence them to stay. Organisations need to develop unique approaches to identify and combine the effective rewards that will retain the various demographic groups (Bussin, 2002 & Pregnolato, 2010). A single standardized retention strategy will avail very little.

The future world of work demographics will be dominated by millennials and GenX. It is an imperative for organization to thus consider and understand the preferences and motivations

of these groups for attraction and retention. Adaptation of reward models based on generational preferences would cater for the life stage and associated work stage of individuals (Bussin & van Rooy, 2014). The rewards model used in this study did not necessarily work together in the combination, but there is value to explore the rewards further. This should take into consideration the South African and global trends for retaining actuarial resources.

## REFERENCES

- Acharyya, M., & Secchi, D. (2015). Why choose an Insurance career? A pilot study of University students' preferences regarding the Insurance profession. *The Geneva Papers on Risk and Insurance—Issues and Practice*, 40, 108–130.
- Actuarial Society of South Africa database. Actuarial Society of South Africa, Cape Town (2016). Retrieved 20 April 2016  
<http://www.actuarialsociety.org.za/>
- Aguinis, H. (2013). *Performance management* (3rd Ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Aguinis, H., Gottfredson, R. K., & Joo, H. (2012). Using performance management to win the talent war. *Business Horizons*, 55, 609-616.
- Aguinis, H., Joo, H., & Gottfredson, R. K. (2013). What monetary rewards can and cannot do: How to show employees the money. *Business Horizons*, 56, 241-249.
- Aguinis, H., & Kraiger, K. (2009). Benefits of training and development for individuals and teams, organizations and society. *The Annual Review of Psychology*, 60, 451-474.
- Allen, N. J., & Meyer, J. P. (1996). Affective, continuance, and normative commitment to the organization: An examination of construct validity. *Journal of Vocational Behavior*, 43, 252-276.
- Armstrong, M., & Brown, D. (2006). *Strategic reward. Making it happen*. London and Philadelphia. Kogan Page Limited. ISBN 0-7494-4634-X
- Armstrong, M., & Murlis, H. (2007). *Rewards management: A handbook of remuneration strategy and practice* (revised 5<sup>th</sup> ed.). London. Kogan Page Limited.

Armstrong, M. (2010). *Armstrong's handbook of reward management practice: Improving performance through reward*. Philadelphia, PA: Kogan Page Limited.

Arnold, J., & Mackenzie-Davey, K. (1994). Graduates' experiences of organizational career management. *International Journal of Career Management*, 6(1), 14-18.

Beechler, S., & Woodward, I. C. (2009). The global war for talent. *Journal of International Management*, 15(3), 273-285.

Beck, K., & Wilson, C. (2000). Development of affective organisational commitment. A cross-sequential examination of change with tenure. *Journal of Vocational Behavior*, 56(1), 114-136.

Bersin, J. (2013). Retention now a big issue. Why the tide has turned. *Bersin by Deloitte*, Retrieved 25 March 2016

<http://www.multibriefs.com/briefs/apta-pps/EmployeeRetention.pdf>

Bhati, A., & Manimala, M., J. (2011). Talent acquisition and retention in social enterprises, *Journal of Security and Sustainability Issues* 1(1): 37–51.  
[http://dx.doi.org/10.9770/jssi.2011.1.1\(4\)](http://dx.doi.org/10.9770/jssi.2011.1.1(4))

Brown, D. (2001). *Rewards strategies: From intent to impact*. CIPD, London.

Brown, P., Fraser, K., Wong, C.A., Mui Se, M. & Cummings, G. (2013). Factors influencing intentions to stay and retention of nurse managers: a systematic review. *Journal of Nursing Management*, 21, 459–472.

Bussin, M. (2002). *Retention strategies: Remuneration answers*. Johannesburg: Knowledge resources.

Bussin, M., & Smit, E. (2013). Effective retention strategies. HRfuture. Retrieved 7 July 2016 from  
<http://www.hrfuture.net>

Bussin, M., & Toerien, W. C. (2015). Influence of reward preferences in attracting, retaining and motivating knowledge workers in South African information technology companies. *Acta Commercii*, 15(1), 1-13.

Bussin, M., & Van Rooy, D.J. (2014). Total rewards strategy for a multi-generational workforce in a financial institution. *SA Journal of Human Resource Management*, 12(1), 1-11.

Cattin, P., & Wittink, D. R. (1982). Commercial Use of Conjoint Analysis: A Survey. *Journal of Marketing*, 46(3), 44-53.

Cameron, J., & Pierce, W. D. (2002). Rewards and intrinsic motivation: Resolving the controversy. Westport, CT: Bergin & Garvey.

Cardy, R.L., & Lengnick-Hall, M. L. (2011). Will they stay or will they go? Exploring a customer-oriented approach to employee retention. *Journal of Business Psychology*, 26, 213-217.

Cascio, W., F. (2010). Managing human resources, productivity, quality of work life, profits (8th ed.). Burr Ridge: Richard D. Irwin.

Chew, J., & Chan, C.A. (2008). Human resources practices, organisational commitment and intention to stay. *International Journal of Manpower*, 29(6), 503-522.

Chiang, F. F. T., & Birtch, T, A. (2011). The performance implications of financial and non-financial rewards: an Asian Nordic comparison. *Journal of Management Studies*, 49(3), 538-570.

Cho, S., Johanson, M.M., & Guchait, P. (2009). Employees' intent to leave: A comparison of determinants of intent to leave versus intent to stay. *International Journal of Hospitality Management*, 28, 374-381.

Chu, B. W. B., Evans, J. R., & Morgan, D.E. (2011). What perceptions do actuarial graduates hold on their university studies, work experience and career direction after completing the university program? Australian School of Business Research Paper No. 2011ACTL12

Coomber, B., & Barriball, K. L. (2007). Impact of job satisfaction components on intent to leave and turnover for hospital-based nurses: A review of the research literature. *International Journal of Nursing Studies*, 44, 297 – 314.  
doi: 10.1016/j.ijnurstu.2006.02.004

Daniels, R. (2007). Skills shortages in South Africa: A Literature Review. School of Economics, University of Cape Town.  
<http://ssrn.com/abstract=992111>

Department of Labour (2009). National scarce skills list 2008, Department of Labour, Pretoria. Retrieved 19 April 2016 from  
[http://www.labour.gov.za/DOL/downloads/documents/useful-documents/skills-development-act/Scarce%20skills%202008\\_part1.pdf](http://www.labour.gov.za/DOL/downloads/documents/useful-documents/skills-development-act/Scarce%20skills%202008_part1.pdf)

Department of Higher Education and Training (2014). Call for comments on the national scarce skills list: Top 100 occupations in demand. Retrieved 20 April 2016 from  
<http://www.inseta.org.za/downloads/Top%20100%20scarce%20skill%20occupations%20in%20south%20africa.pdf>

Department of Labour Skills Development Act (2005). State of Skills in South Africa. Retrieved 19 April 2016 from  
<http://www.labour.gov.za/DOL/downloads/documents/useful-documents/skills-development-act>

Dulebohn, J. H., & Werling, S. E. (2007). Compensation research past, present, and future. *Human Resources Management Review*, 17(2), 191-207.

Dewhurst, M., Guthridge, M., & Mohr, E. (2009). Motivating people: Getting beyond the money. *McKinsey Quarterly*

Fatima, H. 2011. Does employee retention affect organisational competence? *Industrial Engineering* 1(1), 24–39.

George, C. (2015). Retaining professional workers: what makes them stay? *Employee Relations*, 37(1), 102-121.

<http://dx.doi.org/10.1108/ER-10-2013-0151>

Gordon, E. (2009). The global talent crisis. *The Futurist*, 43(5), 34-39.

Ghosh, P., Satyawadi, R., Joshi, J. P., & Shadman, M. (2013). Who stays with you? Factors predicting employees' intention to stay. *International Journal of Organizational Analysis*, (21)3, 288-312.

Harunavamwe, M., & Kanengoni, H. (2013). The impact of monetary and non-monetary rewards on motivation among lower level employees in selected retail shops. *African Journal of Business Management*, 7(38), 3929-3935.

Hendricks, S. (2006, August). Recruitment and retention of appropriately skilled people for the public service to meet the challenges of a developmental state. Paper delivered at the 55th Conference of senior managers of the Free State provincial government, local authorities and the business sector, Thaba Nchu, South Africa.

Higginbotham, J.S. (1997). The satisfaction equation. *Research and Development*, 39(10) 1-9.

Idris, A. (2014). Flexible working as an employee retention strategy in developing countries. Malaysian bank managers speak. *Journal of Management Research* 14(2), 71-86.

Ingham, J. (2006). Closing the talent management gap: Harnessing your employees' talent to deliver optimum business performance. *Strategic HR Review*, 5(3), 20-23.

Igbaria, M., & Greenhaus, J. H. (1992). Determinants of MIS employees' turnover intentions: a structural equation model. *Communications of the ACM*, 35(2), 34-49.

Islam, M., & Alam, J. (2014). Factors influencing Intention to quit or stay in jobs: An Empirical Study on selected sectors in Bangladesh. *Stamford Journal of Business Studies*, 6 9(1), 146-164.

Insurance Sector Education and Training Authority (2011). Sector skills plan. Retrieved 20 April 2016.

[http://www.inseta.org.za/downloads/64\\_INSETA\\_Sector\\_Skills\\_Plan\\_Inside\\_Pages.pdf](http://www.inseta.org.za/downloads/64_INSETA_Sector_Skills_Plan_Inside_Pages.pdf)

Jensen, D., McMullen, T., & Stark, M. (2007). The manager's guide to rewards. What you need to know to get the best for and from your employees. *Business Summaries*, 1-9.

Kaye, B. & Jordan –Evans, S. (2002). Retention in tough times. *Training and Development*, 54(4), 32-37.

Kerr-Phillips, B., & Thomas, A. (2009). Macro and micro challenges for talent retention in South Africa. *SA Journal of Human Resource Management*, 7(1), 1-10.

Kochanski, J. & Ledford, G. (2001). "How to keep me" - retaining technical professionals. *Research Technology Management*, 44(3), 31-38.

Kodwani, A., & Kumar, S.S. (2004). Employee retention: issues and challenges. *HRM Review*, August, 15-20.

Kyndt, F., Dochy, M., & Michelson, B. (2009). Employee retention: Organisational and personal perspectives. *Vocations and Learning*.



Korsakienei, R.; Stankeviciene, A.; Šimelyte, A. & Talackiene, M. 2015. Factors driving turnover and retention of information technology professionals. *Journal of Business Economics and Management*, 16(1), 1-17.

Levay, E. J. (2004). Continuing the global development of the actuarial profession. *British Actuarial Journal*, 10(2), 181-183.

Lowther, M. W., & McMillan, W. J. (2014). Authentic professional development: key to quality service delivery. *South African Actuarial Journal*, 14, 1-18.

Lowther, M. W., & McMillan, W. J. (2006). Planning lifelong professionalization learning for actuaries. *South African Actuarial Journal*, 6, 1-17.

Lowther, M. W., McMillan, W. J., & Venter, F. (2009). Education for actuarial quality must develop more than technical competence. *South African Actuarial Journal*, 9, 53-75.

Malambe, L., & Bussin, M. (2013). Short-term incentive schemes for hospital managers. *SA Journal of Human Resource Management/SA Tydskrif vir Menslikehulpbronbestuur*, 11(1), 1-9.

<http://dx.doi.org/10.4102/sajhrm.v11i1.487>

McConnell, C.R. (2011). Addressing employee turnover and retention. Keeping your valued performers. *The Health Care Manager*, 30(3), 271-283.

Meyer, J.P., & Herscovitch, L. (2001). Commitment in the workplace: Toward a general model. *Human Resource Management Review*, 11, 299-326.

Meeusen V.C.H., Van Dam K., Brown-Mahoney C., Van Zundert A.A.J., & Knape H.T.A. (2011). Understanding nurse anaesthetists' intention to leave their job: how burnout and job satisfaction mediate the impact of personality and workplace characteristics. *Health Care Management Review* 36, 155-163.

Mokonyane, K., & Ramjee, S. (2014). Understanding the commitment of South African actuaries to their profession. Paper presented at the International Congress of Actuaries. Retrieved 12 July 2016,

<http://cas.confex.com>

Moore, A., & Bussin, M. (2012). Reward preferences for generations in selected Information and Communication Technology companies. *SA Journal of Human Resource Management*, 10(1), 1-9.

Morrell, D. L. (2011). Employee perceptions and the motivation of nonmonetary incentives. *Compensation and Benefits Review*, 43(5), 318-323.

Neininger, A., Lehmann-Willenbrock, N., Kauffeld, S., & Henschel, A. (2010). Effects of team and organizational commitment – A longitudinal study. *Journal of Vocational Behavior*, (76), 567-579.

Nienaber, R., Bussin, M.H.R., & Henn, C. (2011). The relationship between personality types and reward preferences. *Acta Commercii*, 11(2), 56–79.

O'Connell, M. & Kung, M., C. (2007). The Cost of Employee Turnover. *Industrial Management*, 49 (1), 14-19.

Pregnoiato, M. (2010). Total rewards that retain: A study of demographic preferences. Cape Town, South Africa: University of Cape Town.

Ramjee, S., Mokonyane, K., & Bagraim, J. (2014). The commitment of South African actuaries to their profession. Presented at the Actuarial Society of South Africa's 2014 Convention 22–23 October 2014, Cape Town International Convention Centre.

Robyn, A. M. 2012. Intention to quit amongst generation Y academics at higher education institutions. MCom thesis. Stellenbosch: Stellenbosch University.

Robinson, S., Merrells, T., & Clinton, M. (2006). Highly qualified and highly ambitious: implications for workforce retention of realising the career expectations of graduate nurses in England. *Human Resources Management Journal*, 16(3), 287-312.

Rumpel, S., & Medcof, J. W. (2006). Total rewards: Good fit for tech workers. *Research-Technology Management*, 49(5), 27-35.

Schlechter, A., Faught, C., & Bussin, M. (2014a). Total rewards: A study of artisan attraction and retention within a South African context. *SA Journal of Human Resource Management*, 12(1), 1-15.

Schlechter, A., Hung, A., & Bussin, M. (2014b). Understanding talent attraction: The influence of financial rewards elements on perceived job attractiveness. *SA Journal of Human Resource Management*, 12(1), 1-13.

Singh, A., & Sharma, J. (2015). Strategies for talent management: A study of select organizations in the UAE. *International Journal of Organizational Analysis*, 23(3), 337-347.

Strydom, N., Schultz, C., & Bezuidenhout, A. (2014). Staff perceptions on talent management and retention: A case of a labour organisation in Gauteng. *South African Journal of Labour Relations*, 38(2), 21-43.

Terblanche, W. (2009). Demand for actuarial resources in South Africa. *South African Actuarial Journal*, 9, 1-52.

Tornikoski, C. (2011). Fostering expatriate affective commitment: a total reward perspective, cross cultural management. *An International Journal*, 18(2), 214-235.

Van Dick, R., Christ, O., Stellmacher, J., Wagner, U., Ahlswede, O., Grubba, C., Hauptmeier, M., Höhfeld, C., Moltzen, K., & Tissington, P. A. (2004). Should I Stay or Should I Go? Explaining Turnover Intentions with Organizational Identification and Job Satisfaction. *British Journal of Management*, 15(4), 351-360.

Vermuelen, L., P., & Sonubi, O., A. (2015). Developing an instrument to assess work-family pressures and resources needed by women managers in South Africa. *African Journal of Business Management* 9(4), 170-185.

WorldatWork. (2016). WorldatWork total rewards model: A framework for strategies to attract, motivate and retain employees, Retrieved 3 April 2016.  
<http://www.worldatwork.org/waw/aboutus/html/aboutus-what-is.html>

WorldatWork. (2008). *GRI Total rewards management*, Scottsdale, Arizona: WorldatWork Press.

WorldatWork. (2012). *Retention of key talent and the role of rewards*, Scottsdale, Arizona. WorldatWork Press

Wilmot, D. (2011). Paper Presented at the 13th Global Conference of Actuaries, Mumbai. Retrieved 21 February 2016.  
[http://115.112.202.200/downloads/gcadata/13thGCA/Paper/13th%20GCA\\_Educating%20Actuaries\\_David%20Wilmot.pdf](http://115.112.202.200/downloads/gcadata/13thGCA/Paper/13th%20GCA_Educating%20Actuaries_David%20Wilmot.pdf)

## Appendix A

Dear

colleagues

I kindly request your participation in this survey which is designed to provide insights into understanding the total rewards that influence intention to stay (or go) amongst actuarial resources in their current organisation. The results of this survey will be used as input towards a Master's dissertation through the University of Cape Town. They will also be used as input to exploring a strategic approach to retaining actuarial resources in MMI.

Your participation is voluntary, confidential and anonymous and you can choose to withdraw at any time during the survey. You will not be requested to supply any identifiable information; ensuring anonymity of your responses. The survey will take approximately 10-15 min to complete. You are kindly requested to please complete it in one sitting.

Please note that as a respondent to this survey, you may choose to participate in a lucky draw where you stand to win a R1000 shopping voucher. Further details on how to participate in the lucky draw are included in the survey. Should you require further information, please feel free to contact the researcher for the project:

Lyn Muzondo [MZNLYN001@myuct.ac.za](mailto:MZNLYN001@myuct.ac.za) or [lyn.muzondo@mmiholdings.co.za](mailto:lyn.muzondo@mmiholdings.co.za)

Thanking you in advance. Your participation is greatly appreciated.

**Follow this link to the Survey:**

[https://ucpcommerce.eu.qualtrics.com/SE/?SID=SV\\_1U0moVgkVeeldPL](https://ucpcommerce.eu.qualtrics.com/SE/?SID=SV_1U0moVgkVeeldPL)

Kind Regards

Lyn

## Appendix B

### Total Rewards Questionnaire:

How important do you consider each of the following factors to be in deciding whether to stay with your current employer? Please respond to scale items on a five point Likert scale from 1 (*not at all important*) to 5 (*very important*)

1. not at all important
2. Slightly important
3. Moderately important
4. Important
5. Very important

### Questions:

1. The opportunities offered by your company for training within your current job e.g. skills training
2. The extent to which your employer supports a balanced lifestyle between your work and your personal life
3. Your employer's provision of work/life programmes such as flexible working arrangements, flexible hours
4. Having social friendships at work
5. The degree to which your employer encourages and organises team building or other social networking activities amongst employees
6. Your employer's provision of health and wellness programmes e.g. Employee Assistance Programmes, counselling services, fitness centres
7. The provision of a competitive pay package (i.e. basic salary plus benefits, allowances or variable pay)
8. Your employer's provision of medical aid, retirement and pension benefits
9. Your employer's provision of incentive bonuses/ variable pay
10. The provision of recognition via non-financial means e.g. certificates of recognition
11. Financial recognition provided by your employer e.g. such as cash, paid travel
12. The extent to which your employer respects differences between race, gender and age
13. Opportunities offered by your employer for learning and career development outside of your current job e.g. sabbaticals, coaching, mentoring, leadership training
14. Opportunities offered by your company for career advancement e.g. job advancement/ promotions, internships and apprenticeships with experts, internal job posting

15. The quality of performance feedback and performance discussions you have had with your supervisor
16. The extent to which you believe your work and contribution is valued
17. The level of challenge and interest you derive from your job
18. The extent to which you believe you are provided with challenging targets
19. Having a manageable workload
20. Having a reasonable work space
21. Having supportive colleagues

Below are factors which influence the decision to stay with your current employer. For each set, choose what is most likely and least likely to influence your intention to stay with your current employer.

Questions 22 – 31

Most likely	Comparison set 1	Least likely
	Performance and recognition Work life balance Remuneration	
Most likely	Comparison set 2	Least likely
	Work life balance Learning opportunities Employee benefits	
Most likely	Comparison set 3	Least likely
	Learning opportunities Career advancement Work life balance	
Most likely	Comparison set 4	Least likely
	Career advancement Performance and recognition  Learning opportunities	
Most likely	Comparison set 5	Least likely
	Work life balance Remuneration Career advancement	

Most likely	Comparison set 6	Least likely
	Learning opportunities	
	Remuneration	
	Employee benefits	
Most likely	Comparison set 7	Least likely
	Career advancement	
	Employee benefits	
	Remuneration	
Most likely	Comparison set 8	Least likely
	Performance and recognition	
	Work life balance	
	Employee benefits	
Most likely	Comparison set 9	Least likely
	Remuneration	
	Performance and recognition	
	Learning opportunities	
Most likely	Comparison set 10	Least likely
	Employee benefits	
	Career advancement	
	Performance and recognition	

Please rate the degree to which you agree with the items below by responding to a five-point Likert scale ranging from (1) *strongly disagree* to (5) *strongly agree*.

32. I would turn down a job offer from another company if it came tomorrow.

33. As far as I can see, I intend to stay with my current company.

34. It is very important for me to spend the rest of my career in this company.

35. I will stay at this company even if other companies offer me higher pay and position.

Please rate the below by responding to a five-point Likert scale ranging from (1) *strongly disagree* to (5) *strongly agree*.

36. I would be very happy to spend the rest of my career with this organisation

37. I really feel as if this organisation's problems are my own



- 38. I do not feel a strong sense of “belonging” to my organisation
- 39. I do not feel “emotionally attached” to this organisation
- 40. I do not feel like “part of the family” at my organisation
- 41. This organisation has a great deal of personal meaning for me

Please rate the below by responding to scale items on a five-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

- 42. I find real enjoyment in my job.
- 43. I like my job better than the average person does.
- 44. I am seldom bored with my job.
- 45. I would not consider taking another kind of job.
- 46. Most days I am enthusiastic about my job.
- 47. I feel fairly well satisfied with my job.

### **Open ended questions**

- 48. Are there any additional rewards (financial or non-financial) which are not included in this survey which could influence you to stay in current organisation?
- 49. Would you be prepared to be contacted after 6 months to check if you are still in the organization? If yes, please add your email address below.

### **Demographic Characteristics:**

- 50. Age in years. Write in space below
- 51. Gender. Choose options below  
Male | Female | Prefer not to say
- 52. Number of dependents? Write in space below
- 53. Years in current employment. Write in space below.
- 54. Are you a qualified actuary?  
Yes | No
- 55. If yes, how many years have you been qualified? Write in space provided
- 56. Would you like to be considered for the lucky draw for a R1000 voucher? If yes, please add your email address